

BUSINESS WEEK

NEW TOOLS FOR
Jet-Propelled
WARFARE
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YEAR
AGO
←



Rodgers & Hammerstein: The boxoffice makes sweet music, too (page 96)

A MCGRAW HILL PUBLICATION

AUG. 11, 1951

TWENTY-FIVE CENTS

ackbone for a Workhorse....



SHARON* HI-STRENGTH STEEL INCREASES PAY LOAD OF MILITARY TRUCKS AND BUSES

Pay Load is the big word for both military and civilian vehicles. There's just one reason for the current shift to high tensile - low alloy steel frames for military trucks and buses.

This high strength strip permits lighter sections and with the same power unit increases Pay Load. That means more crew, or more ammunition, or more food, or more of whatever the Pay Load may be.

*Specialists in STAINLESS, ALLOY, COLD ROLLED and COATED Strip Steels.

SHARON STEEL CORPORATION

Sharon, Pennsylvania

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For information on Titanium Developments contact Mallory-Sharon Titanium Corp., Indianapolis 6.

SHARONSTEEL

RESEARCH KEEPS

B.F. Goodrich

FIRST IN RUBBER



Photo courtesy McCormick and Co., Inc.

Pass the mustard — 500 gallons at a time

A typical example of B. F. Goodrich improvement in rubber

THEY mix mustard for a week in those 500 gallon tanks until it passes a test for taste and smoothness. But when they used wood tanks, in a week's time vinegar would seep through the staves then attack the iron bands that held the tank together. And a burst or leaking tank of mustard is no picnic.

The mustard maker called in a B. F. Goodrich representative. B. F. Goodrich, years ago, made metal tanks practical by finding a way of locking a rubber

lining to metal so strongly and tightly that it practically becomes a part of the tank. The rubber is not affected by the vinegar and, in fact, stands most of the acids used in other industries. Here in the mustard tanks, B. F. Goodrich rubber linings have been in service over 12 years without a single leak.

This B. F. Goodrich method has saved countless dollars for industry — and in all these years has never been improved on, although many have tried.

This is another example of how money was saved and a job done better because B. F. Goodrich improved another of their products. Such improvements are typical — the result of day-by-day research. Your business too can benefit from this policy. Find out by calling in a BFG representative. The B. F. Goodrich Company, Industrial and General Products Division, Akron, Ohio.

B.F. Goodrich
RUBBER FOR INDUSTRY

VANISHING LANDMARK

THIRTY YEARS AGO it was either harness the wind or hitch up old Dobbin to get an extra hand on the farm.

Then America's progressive electric power companies and all industry went to work.

Today, 95% of all U. S. farms enjoy the miracles of electricity . . .

. . . to pump water from well to house and barn, milk the cows, bring safe, bright light to every building.

. . . to make possible all the conveniences of urban living—lights, radio, food freezer and automatic washer.

America is proud of the job that industry

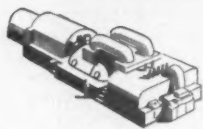
has done to make farm living better and more productive. The nation celebrates Rural Electrification week August 26-31.

Wherever electricity is generated, transmitted, distributed or used, you'll hear the name Allis-Chalmers. For this basic machinery company—one of the Big 3 in electric power equipment—produces a complete line of turbines, generators, switch-gear, transformers, regulators and motors.

In fact, Allis-Chalmers serves *all* industries working to better your good living and safeguard your future.

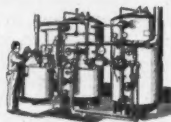
ALLIS-CHALMERS MANUFACTURING COMPANY
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Power generation in a streamlined package! Allis-Chalmers turbo-generators offer clean, attractive lines. These highly self-contained units simplify installation, inspection and maintenance.

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PROSPER with POWER!

America's strength, prosperity and good living have been paced by rapidly expanding generation and utilization of electric power.

as Electric Power goes rural!



Wind-driven water well pump. Photo by Rosskam, courtesy Standard Oil Co. (N. J.)

ALLIS-CHALMERS



One of the Big 3 in Electric Power Equipment—
Biggest of All in Range of Industrial Products



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*MH is Mass Handling—the systematic movement of the most units in the shortest time, at lowest cost.

FOR COMPLETE FACTS about how Towmotor cut handling costs 95% . . . cut loading costs 75% . . . increased plant capacity 400% . . . saved 160 man-hours per week . . . write today for the latest issue of "HANDLING MATERIALS ILLUSTRATED" containing on-the-job photos!



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BUSINESS WEEK • Aug. 11, 1951



A NEW TWIST IN ASSEMBLING AUTO ACCESSORIES

AN APPLICATION OF KELLER AIR TOOLS

These girls are assembling automobile accessories. They pick up the parts passing along on a conveyor belt and fasten them together with tiny screws.

Running down these screws by hand, as it formerly was done, was tedious, time consuming work which job analysts rated about 50% efficient compared to modern production methods.

So they mounted a power screw driver on the bench be-

fore each worker. Now a single hand motion, pressing the assembly against the screw driver bit, runs each screw down tight.

Today, this assembly department has earned an efficiency rating of 125%—substantially better than production estimates of the experts. The girls are proud of their record and say that now the work is much easier.

Various types of power equipment were tried before

Keller Air Tools were given a chance to prove themselves. After "Kellerizing," it was found that breakdowns and interruptions for tool maintenance came much less frequently, and the work proceeded faster and more smoothly day after day.

Keller makes several kinds of air-powered tools—screw drivers, nut setters, die grinders, riveters, drills, and hoists. These work-saving tools speed production and reduce the manufacturing costs of many different industrial products.



Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

AIR MOTORS • AIR HOISTS • AIR HAMMERS • COMPRESSION RIVETERS • GRINDERS • DRILLS • SCREW DRIVERS • NUT SETTERS



Edison Televoice
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at $\frac{1}{3}$ the cost!

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Edison TeleVoicewriter

The Televoice System

EDISON TELEVOICE integrates perfectly with the Disc Edison Voicewriter, the world's finest individual dictating instrument. Today, no one can match Edison's complete line: TELEVOICE stations for average dictation, the Disc Edison Voicewriter where a single instrument is required.

GET THE WHOLE STORY—NOW! Send for this new descriptive booklet. Or, to arrange for a demonstration, call "EDIPHONE" in your city. In Canada: Thomas A. Edison of Canada, Ltd., Toronto 1, Ontario,

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EDISON, 64 Lakeside Ave., W. Orange, N. J.

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COMPANY _____

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In BUSINESS this WEEK...

Labor Goes to Press

• There's a long-range plan behind ITU's action in setting up a chain of newspapers. P. 34

Throw It Out!

• A scrappy day in the life of a manufacturing executive. P. 52

The South's Unsouthern City

• Charlotte's new citizens have changed the mold of one of the oldest cities in Dixie. P. 70

A Happy Autumn

• When you look at the forecast for consumer spending, you can easily see why retailers are optimistic about the fall. P. 112

Nobody Is Growing Faster...

... than the chemical industry. And there's even more expansion yet to come. P. 123

Long Live the Trusts

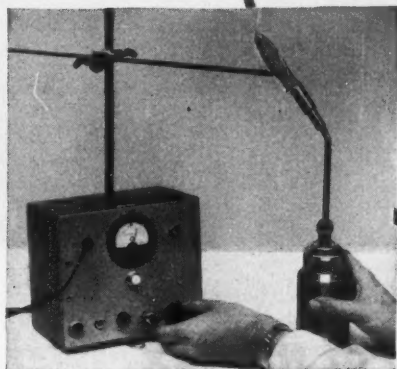
• There's a good chance that U.S. antimonopoly policy in Japan will become just a memory. P. 145

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HOT TIP FOR JET DESIGNERS!



"FLAME PROBE" (left) is a revolutionary new device developed by Phillips research scientists to get at the heart of the mystery of flames.

More than 25 years ago, Phillips Petroleum Company decided that the way to get ahead in the intensely competitive oil business was through resourceful and persevering scientific research.

A recent example of such research is the Phillips Flame Probe. With it, we can locate, measure and analyze the combustion reaction zones inside jet engines. This Flamometer* probes at the very heart of fire itself. Electronic messages from this device promote new understanding of flames and thus are expected to be of great assistance in

design and operation of jet engines, or, indeed, wherever high combustion efficiency is necessary under difficult conditions.

Beginning with the study of petroleum hydrocarbons as a source of power and heat, Phillips research has also made possible expansion in the new and boundless realm of petrochemicals.

By finding new ways of using petroleum for the benefit of more people, Phillips research assists also in the healthy diversification of the company's business.

*A Trade-mark



PHILLIPS PETROLEUM COMPANY

Bartlesville, Oklahoma

We put the Power of Petroleum at America's Service



Industry taxed
\$160,000,000*
by
Eye Accidents



How much of this tax are YOU paying?

Eye accidents cost industry about 110,000,000 man hours in 1949 in *lost time* — and about \$160,000,000 in dollars lost. What are YOU doing about it?

One large company installed an AO Eye Protection Program and practically eliminated lost man hours due to eye accidents. This company also reports a drop in compensation costs from a high of \$2.80 to an average of \$.40 per worker annually. Other companies report similar savings.

An AO Eye Protection Program pays off—pays for itself in six months time or less. Prove it to yourself. Call in an AO Safety Representative. He will show you how you can reduce or eliminate your share of industry's high eye accident tax.



American Optical
SAFETY PRODUCTS DIVISION

*Estimated lost man hours only.
Does not include average cost of compensation which even for the low cost year of 1938 was \$328.

Southbridge, Massachusetts • Branches in Principal Cities

BUSINESS OUTLOOK

BUSINESS WEEK

AUGUST 11, 1951



Breakeven points are beginning to worry a large segment of American business this quarter—even as the others fret over high taxes.

Many companies are harried from two sides. On the one hand are high costs. On the other, controls fix prices and cut volume.

Thus inflexible overhead has to be borne by fewer units.

•
Military business will avert red ink for many companies that have been cut back on civilian output. Yet the profit on this business, at best, is thin.

•
Profits in the auto industry will make an interesting study.

Take the biggest maker: General Motors turned out 176,028 passenger cars in July, against 263,635 a year ago. Compared with most other Julys, this year's figure wouldn't be bad.

But here you bump into what GM has been saying all along: "Don't talk about flush 1950 profits; just wait until unit volume goes down a bit."

Costs in 1951 aren't what they have been in years past. You can't say that volume that would have been good before is good now.

•
Companies that fabricate raw materials that are wobbly pricewise are taking something of a licking on inventory.

Textiles provide an example. Most weavers are using wool that cost about \$4 a lb. in a market now quoted around \$2.50; cotton that cost 44¢ a lb. a short time ago now is 35¢ (page 28).

Of course, contracts were written on the higher prices. So long as buyers don't welsh—and unit volume doesn't dip—it's all right.

But, in most cases, buyers are welshing, and unit volume is way down.

•
Textile mills are fighting for government orders to keep their volume up. An extreme example is the Navy's invitation for bids on a bit over 10-million yds. of sheeting. Bids totaled 70-million.

•
Record employment in July—62½-million against the previous peak of 62.4-million last August (page 15)—wasn't fully matched by payrolls or production.

The mere fact that a record number of people had jobs doesn't mean they were drawing pay. By definition, a person laid off but expecting to be recalled isn't jobless. And July was a month for layoffs.

And it also was the big month for vacations. Thus the usual indicators don't mean much for July.

•
Initial claims for unemployment insurance ran ahead of a year ago in July—even as employment was setting new records. And the total drawing unemployment insurance jumped from the June level. Neither figure, however, should be stressed too heavily.

New claims: Many people filing them were laid off, but expected to be recalled. The claims were made only to play safe.

Compensated unemployment: The jump from 888,000 on "comp" at the end of June to 997,000 July 7 may be blamed on a turn of the calendar; many who had exhausted benefits once more became eligible on July 1.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

AUGUST 11, 1951

July figures on inventories, when they come out about a month from now, will show considerable liquidation at wholesale and retail levels.

Even in June, a good start had been made in that direction.

Wholesalers' stocks, below \$11.9-billion, were down more than \$120-million in a month (although nearly \$2.4-billion over a year earlier).

Retailers reduced inventory by more than \$200-million in a month. Their stocks at the end of June were \$18.7-billion, against more than \$18.9-billion a month earlier (but a full \$4-billion over a year ago).

•
Commercial construction is beginning to feel the pinch of government controls. Value of such building in July, at \$119-million, was down 8½% from June. It was the lowest monthly figure since last August.

Nevertheless, the year to date is 39% ahead of a year ago.

•
Government is becoming a big competitor with industry for the materials required in industrial expansion.

Industry spent \$191-million on new buildings in July. That's a new record by a wide margin; it tops year-ago levels by 127%.

At the same time, publicly financed industrial construction rose to \$95-million—very nearly half as much as private.

Public outlays on industrial building were five times as large as in July, 1951; for the year to date they are almost four times as high.

•
There's no seasonal bulge in the curve for homebuilding this year.

July's private residential construction, valued at \$922-million, was only a shade ahead of June. It was 27% under a year ago.

•
One of the factors in the rising national income—and the good retail sales outlook—is the cash take of the farmer.

The country's farmers raked in an estimated \$15.4-billion in the first seven months of this year. That's 17% ahead of 1950. A lot of the gain represents higher prices, of course.

•
Nobody seemed much concerned this week when the government's first official report placed this year's cotton crop at 17¼-million bales—one of the two largest on record.

One reason is that the world seems willing to take all that we will sell—as long as it's on the cuff.

Exports in the season just ended were about 4.3-million bales.

And Secretary of Agriculture Charles Brannan, just back from Europe, predicts that shipments abroad will be even higher this season.

•
Use of cotton in the U. S. apparently broke all records in the season ended on July 31. The total probably came to 10-million bales.

That, with exports, brought total disappearance to around 14.8-million bales—and cut the surplus to 2-million bales, lowest in many years.

•
Committee approval in the House of \$56.1-billion for the military leaves little chance of a business slump in 1952—if such a sum gets through both chambers of Congress.

Nor do new plans for an Air Force of 130 or more groups (page 15).



Photograph by Barton Murray

"They look whiter than white!"

That's what housewives everywhere are saying now that soap manufacturers are adding the remarkable new "whitening agents" or "brighteners" to their laundry soaps and detergents.

And it's true. These whiteners make white fabrics reflect more "visible" light and therefore appear much whiter and brighter. But their use is by no means limited to whites—they also brighten some of the pastel shades such as baby pink and baby blue as they come from the wash.

Such brightening agents are made with AENO® Cyanuric Chloride, an interesting chemical compound produced by American Cyanamid's Industrial Chemicals Division. Cooperating closely with the soap industry, Cyanamid has helped to make this improvement possible...an improvement which, quite literally, is "brightening up" Mrs. America's work-a-day world.

*Trade-mark



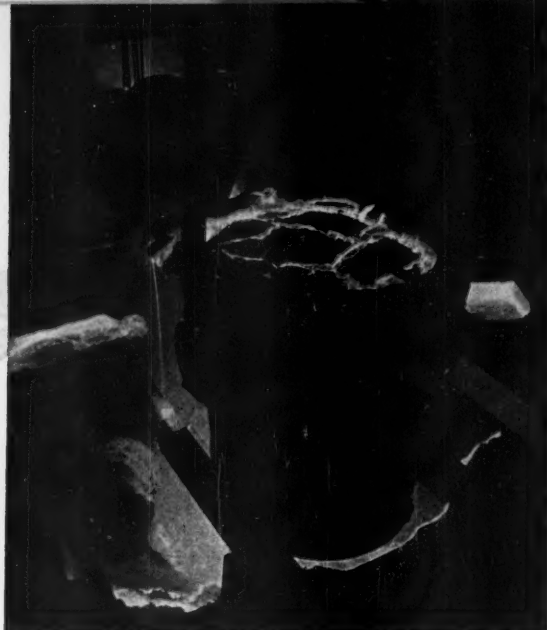
AMERICAN Cyanamid COMPANY

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Materials for the chemical process industries—among the many industries served by Cyanamid



A stiff leg crane, manufactured by Clyde Iron Works, Inc., Duluth, Minnesota, a Barium subsidiary, producers of many types of modern material handling equipment, such as Whirley cranes, hoists, winches, derricks, pile drivers, road rollers, etc. Floating cranes, material handling equipment and barges are also produced at Barium's subsidiary, Wiley Manufacturing Company, Port Deposit, Maryland.



One of a battery of six open hearth furnaces producing carbon steel at Barium's Central Iron and Steel Company, Harrisburg, Pennsylvania, producers of steel plate, stampings and fabrications. Phoenix Iron and Steel Company, also operating six open hearth furnaces, produces structural steel and shapes and through their subsidiary, Phoenix Bridge Company, fabricates bridges, buildings, and other similar structures.



This large, modern press at Barium's Geometric Stamping Company, Cleveland, Ohio, stamps out medium and heavy metal parts. Frequently, they are then weld-assembled into complete and semi-finished products. To cut parts costs without cutting quality, investigate stamping. Write Barium.



Spring ends are "squared off" on this tremendous grinding machine at Cuyahoga Spring Company, Cleveland, Ohio, a subsidiary of Barium. Coiled wire springs and wire specialties are made to order, including moulding clips... stamped clips that do not require any bolts, screws or nuts.

**LINKED TOGETHER
TO SERVE INDUSTRY
WITH A**

Continuous Chain of Steel and Steel Products

One source supplies industry with steel in many forms . . . plate, structurals, fabrications, forgings, stampings, springs, bolts and nuts.

One source controls quality from blast furnace to finished product . . . ready to work as a self-contained unit to speed urgently needed orders.

That source is Barium Steel Corporation . . . a team of strategically-located companies working closely together, bringing joint knowledge to bear to solve your steel problems.

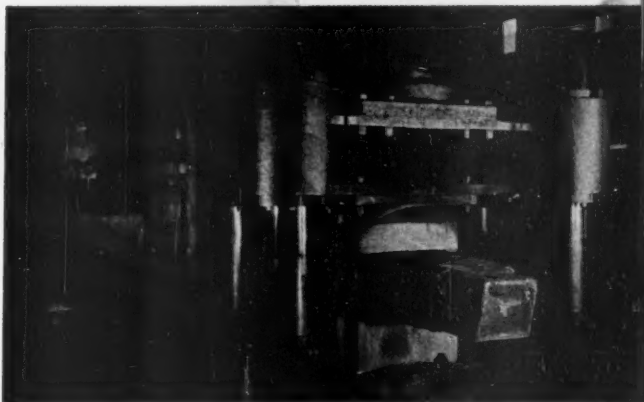
Just a glance at the picture-captions partly reveals Barium's diversity. The scope is even broader, as you'll find out, at no obligation, by describing your problem or need. Simply address Barium at 25 Broad St., New York City.

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*A coordinated effort of
15 companies working in steel*
MILL PRODUCTS • SHAPES TO ORDER • END PRODUCTS

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COMPANY • CHESTER BLAST FURNACE • CLYDE IRON
WORKS, INC. • CUYAHOGA SPRING COMPANY • ERIE
BOLT AND NUT COMPANY • GEOMETRIC STAMPING
CO. • GLOBE FORGE, INCORPORATED • INDUSTRIAL
FORGE & STEEL, INC. • JACOBS AIRCRAFT ENGINE
CORP. • KERWATH MANUFACTURING CO. • KERWATH
LTD. (CANADA) • PHOENIX BRIDGE CO. • PHOENIX
IRON & STEEL CO. • WILEY MANUFACTURING CO.



Precision threads on special alloy steel bolts are ground on this automatic machine at Barium's Erie Bolt and Nut Company, Erie, Pennsylvania. Here every threaded fastening device . . . even commercial bolts and studs . . . must pass the toughest inspection test.



Flat die forgings, both pressed and hammered, are produced from ingots like this, which are melted in open hearth furnaces at Industrial Forge & Steel, Inc., Canton, Ohio. This subsidiary of Barium is a leading specialist in heavy forgings, both carbon and alloy.



Bolt heads are being formed on this gigantic upsetting machine at Bayonne Bolt Corporation, a subsidiary of Barium. Nuts, rivets, and other related steel products are also made by this subsidiary.




ROYAL FAMILY OF PLASTICS

Naugatuck Marvinol is in your plastic future!

This could be the unveiling of a bright, new future for your products.

For the product wonders in this crystal ball have been worked by a marvelous material from which your products could be made — Naugatuck Marvinol vinyl resin.

Here is a Marvinol-made handbag — *soft and pliable* as leather — yet perfectly washable, and it *won't crack, peel, scuff or fade*.

Here Marvinol is *rigid and rugged* — in a fountain pen barrel. There it is *flexible* — in wire covering.

Here are high-style tapestries with a softly woven look

and feel. And colorful upholsteries with a *stability* that *holds their shape and fit*. And a snag-free zipper that closes with *no track!*

All these and hundreds more products can be made with Marvinol — rigid as steel, flexible as fabric, crystal clear or opaque, in all colors. In fact, Marvinol can be almost anything *you* want to make it.

Marvinol comes from the Naugatuck Chemical Division of the United States Rubber Company — a basic source of raw materials. It's in the plastics business to *stay and grow* with you. Write us and see what Marvinol can do for *you*.



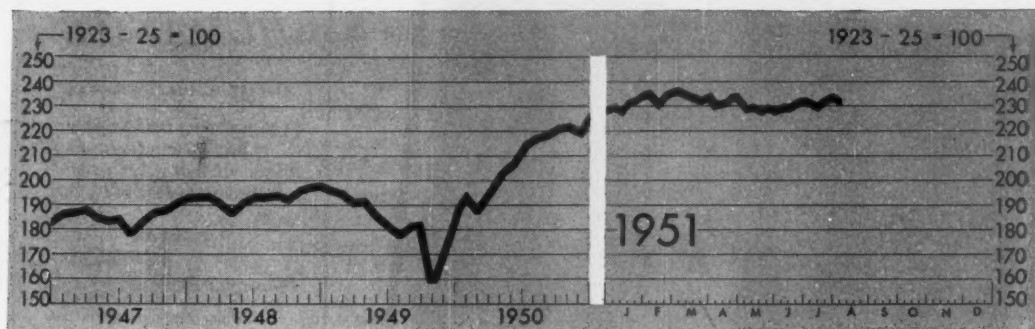
Division of UNITED STATES RUBBER COMPANY

58 ELM ST., NAUGATUCK, CONNECTICUT

BRANCHES: Akron • Boston • Charlotte • Chicago • Los Angeles • New York • Philadelphia • In Canada: Naugatuck Chemicals, Elmira, Ontario

MARVINOL® vinyl resins • KRALASTIC® styrene copolymers • VIBRIN® polyester resins

FIGURES OF THE WEEK



Business Week Index (above) \$ Latest Week Preceding Week Month Ago Year Ago 1946 Average

PRODUCTION

| | | | | | |
|---|----------|----------|----------|----------|----------|
| Steel ingot production (thousands of tons)..... | 2,021 | 2,029 | 2,029 | 1,927 | 1,281 |
| Production of automobiles and trucks..... | 116,894 | †131,598 | 98,087 | 175,572 | 62,880 |
| Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)..... | \$45,728 | \$53,981 | \$56,080 | \$40,378 | \$17,083 |
| Electric power output (millions of kilowatt-hours)..... | 7,003 | 7,005 | 6,077 | 6,247 | 4,238 |
| Crude oil and condensate production (daily av., thousands of bbls.)..... | 6,201 | 6,205 | 6,169 | 5,640 | 4,751 |
| Bituminous coal production (daily average, thousands of tons)..... | 1,704 | 1,713 | 1,912 | 1,786 | 1,745 |

TRADE

| | | | | | |
|--|------|-------|-----|------|------|
| Miscellaneous and l.c.l. carloadings (daily av., thousands of cars)..... | 75 | 73 | 78 | 79 | 82 |
| All other carloadings (daily av., thousands of cars)..... | 62 | 61 | 59 | 62 | 53 |
| Department store sales (change from same week of preceding year)..... | -21% | †-23% | -2% | +42% | +30% |
| Business failures (Dun and Bradstreet, number)..... | 171 | 184 | 129 | 168 | 217 |

PRICES

| | | | | | |
|---|---------|---------|---------|---------|---------|
| Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)..... | 466.8 | 465.3 | 481.8 | 458.9 | 311.9 |
| Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100)..... | 311.7 | 313.5 | 322.9 | 279.1 | 198.8 |
| Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100)..... | 354.8 | 354.1 | 365.6 | 349.0 | 274.7 |
| Finished steel composite (Iron Age, lb.)..... | 4.131¢ | 4.131¢ | 4.131¢ | 3.837¢ | 2.686¢ |
| Scrap steel composite (Iron Age, ton)..... | \$43.00 | \$43.00 | \$43.00 | \$39.17 | \$20.27 |
| Copper (electrolytic, Connecticut Valley; lb.)..... | 24.500¢ | 24.500¢ | 24.500¢ | 22.500¢ | 14.045¢ |
| Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)..... | \$2.32 | \$2.31 | \$2.27 | \$2.22 | \$1.97 |
| Cotton, daily price (middling, ten designated markets, lb.)..... | 35.18¢ | 36.49¢ | 43.45¢ | 37.73¢ | 30.56¢ |
| Wool tops (Boston, lb.)..... | # | # | # | \$2.55 | \$1.51 |

FINANCE

| | | | | | |
|--|--------|--------|--------|--------|-------|
| 90 stocks, price index (Standard & Poor's)..... | 182.1 | 178.7 | 172.0 | 145.5 | 135.7 |
| Medium grade corporate bond yield (Baa issues, Moody's)..... | 3.52% | 3.51% | 3.55% | 3.25% | 3.05% |
| Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)..... | 2½-2¾% | 2½-2¾% | 2½-2¾% | 1½-1¾% | 1-1½% |

BANKING (Millions of dollars)

| | | | | | |
|--|--------|--------|--------|--------|----------|
| Demand deposits adjusted, reporting member banks..... | 50,383 | 50,535 | 49,340 | 48,264 | ††45,210 |
| Total loans and investments, reporting member banks..... | 70,100 | 70,114 | 70,268 | 67,847 | ††71,147 |
| Commercial and agricultural loans, reporting member banks..... | 19,124 | 18,946 | 19,153 | 14,022 | ††9,221 |
| U. S. gov't guaranteed obligations held, reporting member banks..... | 30,997 | 30,949 | 30,886 | 35,496 | ††49,200 |
| Total federal reserve credit outstanding..... | 24,282 | 24,063 | 23,970 | 18,762 | 23,883 |

MONTHLY FIGURES OF THE WEEK

| | | Latest Month | Preceding Month | Year Ago | 1946 Average |
|--|-----------|--------------|-----------------|----------|--------------|
| Wholesaler's inventories (seasonally adjusted, in millions)..... | June..... | \$11,864 | \$11,988 | \$9,493 | \$5,471 |
| Retailer's inventories (seasonally adjusted, in millions)..... | June..... | \$18,738 | †\$18,948 | \$14,720 | \$9,400 |
| Private expenditures for new construction (in millions)..... | July..... | \$1,858 | †\$1,824 | \$2,016 | \$803 |
| Public expenditures for new construction (in millions)..... | July..... | \$932 | \$878 | \$680 | \$197 |
| Employment (in millions)..... | July..... | 62.5 | 61.8 | 61.2 | 55.2 |
| Unemployment (in millions)..... | July..... | 1.9 | 2.0 | 3.2 | 2.3 |

*Preliminary, week ended Aug. 4.

††Estimate (BW—Jul. 12 '47, p16).

#Insufficient trading to establish a price.

‡Date for 'Latest Week' on each series on request.

†Revised.



Problem: SHOULD JIM LOSE THIS LEG?

James Mack had suffered so much he didn't care. His leg had been broken in a braiding machine . . . set and apparently healed . . . then broken again when he fell after returning to his job. The second setting failed to unite and doctors feared that amputation would be necessary. Discouraged, unable to work and suffering intense pain, Jim himself was ready to give up.

The solution

Liberty Mutual does not give up easily when human values are at stake. For difficult cases like Jim's, the Company maintains a unique system of Medical Advisers—thirty-three eminent specialists available for consultation in key cities. Jim's history and X-rays were reviewed by our Medical Advisers in Boston and Chicago, who agreed he could be saved from a crippling amputation. Jim went to Chicago, where a distinguished surgeon performed a bone graft. He's walking now, and will soon return to work.

HUMANICS: A new Program

Providing Medical Advisers for tough cases is only one phase of Liberty Mutual's comprehensive program.

Called *HUMANICS*, it brings together all activities for preventing accidents and reducing the disability and cost resulting from accidents that do occur.

HUMANICS guards machines . . . and puts "invisible guards" around men to prevent them from hurting themselves. It concerns itself with the medical care of injured workers and the rehabilitation of the badly injured. It is not a departmental activity with Liberty Mutual, because the prevention of loss in all forms is the basic business of the Company.

You can check your own program

"*HUMANICS: A new concept of loss control in industry*" is a new book describing five ways to reduce the cost of Workmen's Compensation Insurance, increase productivity and improve employee relations. A request on your business letterhead will bring you a copy without cost or obligation. Address Liberty Mutual Insurance Company, 175 Berkeley Street, Boston 17.

HUMANICS

LIBERTY MUTUAL'S PROGRAM

to keep workers from being hurt
... to help them recover sooner
if they are hurt ... to rehabilitate them if they are badly hurt,

THROUGH

Industrial Engineering

to eliminate physical and mechanical hazards and to establish safe methods and operating practices

Industrial Hygiene

to assure a healthful working environment

Industrial Preventive Medicine

to fit the right man to the right job, or to adjust the job to the man — and to protect the worker's physical fitness.

Claims Medical Service

by eminent specialists, to facilitate the rapid recovery of injured workers

Rehabilitation

to restore badly injured workers to useful, productive lives, through Liberty Mutual's Rehabilitation Centers in Boston and Chicago and specialized medical facilities wherever available.



We work to keep you safe

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
AUG. 11, 1951



DiSalle will raise prices for all manufacturers by industries. He doesn't have to. The Capehart amendment in the control law requires only that businessmen get increases on an individual, case-by-case basis.

But DiSalle is in this pickle: Should he permit industry to allocate overhead costs among various items as it wishes? Or should the Office of Price Stabilization screen each application for an increase minutely?

The paper work involved in a real audit would be stupendous. OPS says it would need 15,000 new auditors, cost-accountants, etc. to do the job. Such a work load would bog OPS down so badly that it couldn't function at all.

So a new set of manufacturers' regulations are coming. They will replace CPR-22, CPR-30, and the other tailored orders. Base periods, cutoff dates, and allowable costs will be changed to conform to Capehart's amendment.

The new orders won't be issued for some weeks yet. Mobilization boss Wilson has told DiSalle not to string them out piecemeal, to keep quiet until everything's set.

•
The auto makers will get some orders for machine tools—not soon, but Washington has made the decision on policy, and details are being tackled.

United Auto Workers boss Walter Reuther is the plan's biggest huckster. He wants to keep his union members working; and Truman is sympathetic. However, defense officials aren't buying Reuther's plan in toto. He would give prime contracts to the auto makers, who in turn would subcontract to suppliers, then assemble the tools in auto plants.

Instead, tool jobs will be farmed out to both auto makers and their suppliers. By and large, assembly will be done in machine tool plants. Some prime contracts may go to autos, of course. Fisher Body, which made boring mills and horizontal borers in World War II, already is dickering for a contract.

•
Another 500,000 men will put on uniforms by next midyear. That's the minimum Secretary Marshall figures is needed for rotation—to replace enlisted reserves and men whose enlistments expire.

This doesn't take care of any expansion beyond the 3.5-million ceiling. Then more would be needed.

So there will be more drafting, and more reserves called up. And the reserves will be junior officers—from among the ranks of your junior executives and technicians (page 22). Too, some enlisted specialists will be grabbed off.

The Pentagon wants the rotation to be going well by yearend—to get at least some of the boys home by Christmas.

•
Pressure is mounting for hiking the ceiling on military manpower and guns. The brass is blueprinting this program for the next fiscal year:

A 30-division Army, fully manned; at least 130 Air Force groups; and a Navy with four more carriers plus supporting ships.

Add it up, and you get a manpower peak of nearly 5-million. Compare that with the 3.2-million in uniform now, and you can see a lot of vacancies in classrooms and offices.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
AUG. 11, 1951

The Iranian dispute will cost the Western Hemisphere 60-million barrels of oil before it's settled. It will have to be made up from U. S. supplies —by increasing daily production quotas in Texas.

Even after Iran, the committee of oil companies set up to allocate to world markets in case of more shutoffs will stay alive. This group, the Foreign Petroleum Supply Committee, represents 19 U. S. companies operating abroad. It's got a waiver of the antitrust laws from the Justice Dept.

Deficits in Western Europe resulting from the Iranian crisis will be met by diverting U. S.-bound shipments from Latin America to Europe. Increased domestic output then is needed to supply the eastern states.

A reward for Harriman is being talked seriously—appointment as Secretary of State. Moreover, Truman could most easily appease Acheson's critics by selecting Harriman at his peak popularity.

The Democrats have hopeful eyes on three western Republican Senate seats: Cain's in Washington; Ecton's in Montana; and Watkins' in Utah. They will run Rep. Henry Jackson against Harry Cain; Rep. Michael Mansfield against Zales Ecton; and Ray Murdock, ex-Sen. Abe Murdock's brother, against Arthur Watkins.

Sen. Duff's fight with Grundy and Owlett in Pennsylvania is more than just a state row. It's crucial for the Eisenhower drive. The keystone state is needed badly by the Eisenhower forces, and Duff is all for Ike. Grundy and Owlett lean to Taft. Duff looks the stronger.

New York will stand solid—Dewey will see to that.

Sen. Lodge probably can keep Massachusetts in line behind Eisenhower; but the delegates may have to favorite-son Saltonstall first.

All this forms a hard core of convention votes—on paper. But the general will have to give the nod to make it real.

The structural steel shortage is forcing drastic cuts in civilian building. Take these examples of cutbacks coming in the fourth quarter: Schools and hospitals, down 40% from planned; highways, down 50%; Army civil works (including flood control), down 30%; utility power stations, down 20%.

Starting in October, all building will be under license and materials allocation (page 26).

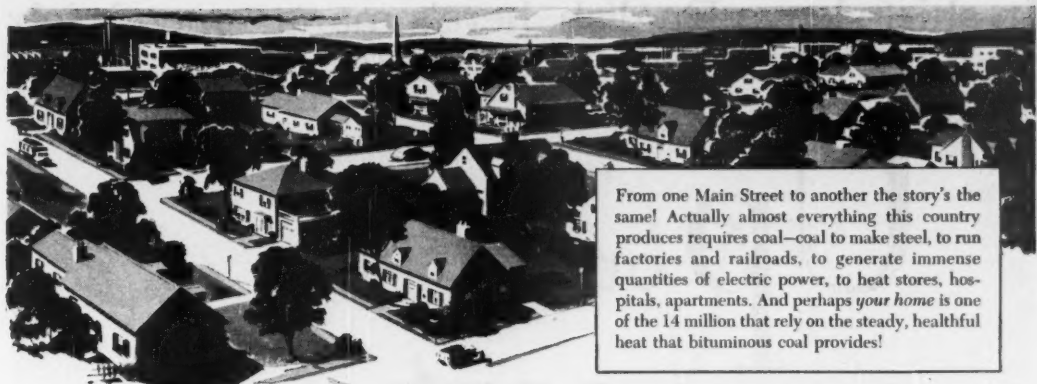
Railroads are running into tough luck at the period of peak car needs.

Freight car builders, with their sights still set on 10,000 cars a month, run into one difficulty after another. Last month it was strikes and floods, cutting output to 2,290.

There's a novel gimmick for small business in the new control law. Placed right under the President, the new Small Defense Plants Administration can operate freely, limited only by the money Congress gives it.

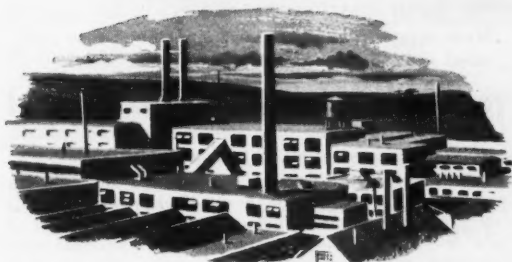
Its authority cuts across the lines of all agencies, including the Defense Dept. It has a \$50-million drawing account to help the smalls get started on defense contracts. It can take any contract it chooses and parcel it out to subcontractors as it pleases.

Truman hasn't got anyone to run it yet.

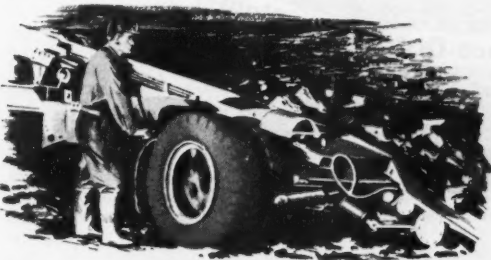


From one Main Street to another the story's the same! Actually almost everything this country produces requires coal—coal to make steel, to run factories and railroads, to generate immense quantities of electric power, to heat stores, hospitals, apartments. And perhaps *your home* is one of the 14 million that rely on the steady, healthful heat that bituminous coal provides!

From East Side to West Side... your town takes a lot of Coal!



This factory is typical of the thousands of plants that turn out everything America needs. It gets its power from coal—America's #1 steam fuel—for coal is practically everywhere the most economical power source. And today, automatic controls, automatic coal and ash handling apparatus net even larger savings—minimize dramatically the inconveniences associated with older installations.



Highly developed machines like the giant loader above have made it possible for the American miner to reach a daily output that's 4 to 24 times that of any miner in Europe or Asia. Today, the American miner is actually a skilled machine operator. Fully 98% of all American coal is mechanically cut—about 75% mechanically loaded.



From periscope to keel it took 800 tons of coal to make the steel that went into this submarine! Today more and more coal is needed for national defense. However, thanks to America's vast coal reserves and the great degree of mechanization that progressive mine operators have developed in mining and preparing coal—*rearmament will get all the coal required without any pinch on the home front!*

In their constant search for a better and more economical coal product the managers of this country's 8,000 mines have invested hundreds of millions of dollars in research—in modern machinery—in finding and developing new mine properties. As a result, today's output per man in America's coal mines is more than 32% greater than in 1939—one of the greatest efficiency gains in American industry. *This nation can count on her privately managed coal companies for all the coal it needs to stay strong—to become stronger!*

BITUMINOUS COAL INSTITUTE
A DEPARTMENT OF NATIONAL COAL ASSOCIATION
WASHINGTON, D. C.

**FOR NATIONAL DEFENSE
FOR PEACETIME PROGRESS YOU CAN COUNT ON COAL!**

In shirt-sleeve English, here's management's job:

Up output cut costs

EASY TO SAY—but hard to carry out! That's why every major field of industry and transportation, in all the 48 States, calls on skilled Texaco Lubrication Engineers and Texaco lubricants to help step up production, cut unit costs.

FOR EXAMPLE*— Mine car wheel bearings roll easier, last longer and cost less to maintain after Texaco Lubrication Engineers recommend the proper grade of Texaco Olympian Grease. ★ Full details on request

THE TOUGH JOBS GO TO TEXACO! Here's one instance: *More copper mining equipment in the U.S. is lubricated with Texaco than with any other brand.*

ONE PURCHASE AGREEMENT gets this production-boosting cost-cutting plan rolling in all your plants, wherever located in all 48 States.

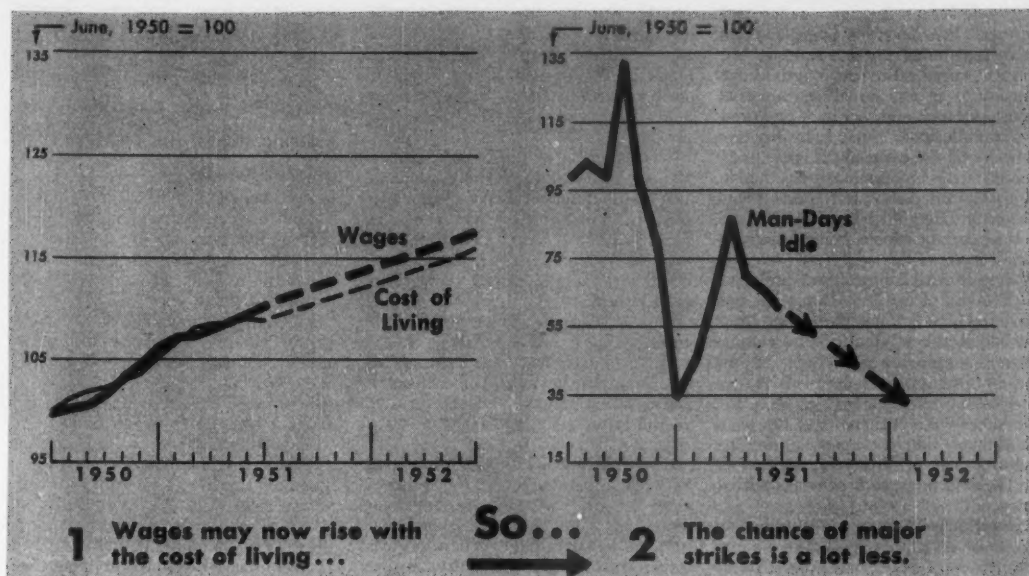
Call the nearest Texaco Distributing Plant or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.



THE TOUGH JOBS GO TO TEXACO

TEXACO
INDUSTRIAL LUBRICANTS





WSB'S EMERGENCY POLICY MAY SET

U.S. Wage Pattern From Here on Out

Now it's official: Wage rates will be set by the cost of living.

Neither supply and demand, nor ability to pay, nor collective bargaining will be primary influences on changes in the level of hourly wages. At least for the duration of the defense program, all these will be secondary to prices as determinants of wages.

The "at least" is important. Policies for dealing with long-enduring emergencies have a way of staying on after the emergency is over. This is especially true of matters affecting labor relations. In that area, any change from prevailing patterns always raises controversies, disputes, and difficulties.

In World War I the right of labor to organize was formulated as a principle for dealing with wartime labor problems. After the war this became a standard upon which government policy and subsequent legislation was based.

In World War II the War Labor Board dictated the quasi-union shop and a whole series of fringe benefits as a way of compromising union demands and employer resistance. These emergency measures were never dropped. They remained, and still remain, the standard pattern.

A new mobilization has produced the new wage policy. It was enunciated over the weekend by the Wage Stabilization Board and will be put into effect shortly. It has a long life expectancy.

In the end, this may prove to be the most important single consequence for

the domestic economy to come out of the Korean crisis.

• Calculation—In brief, the new policy changes the calculation for how much is allowable in wage increases under economic stabilization rules. Up to this point, wage raises, with certain exceptions, were held to a limit 10% above the wage level of Jan. 15, 1950. Now there will be added to that a further percentage equal to the percentile change in the cost-of-living index since Jan. 15, 1951.

To see how this works, take a wage rate that stood at \$1.65 per hour in January of 1950; under the old 10%-allowable rule, it could be advanced by 16½¢, to \$1.815. The cost-of-living index number for January, 1951 (new scale) was 181.5. The most recent available living-cost-index figure is 185.2—for June, 1951. A further wage increase of 3.7¢ is therefore permissible to bring the hourly wage to \$1.852.

In this particular case, a one-point advance in the index permits a 1¢ increase in the hourly wage. If 10% over the January, 1950, base had yielded a wage of \$.9075 an hour, the cost-of-living index would have had to rise two points before a 1¢-an-hour increase would be allowable. And if the January, 1950, wage, plus 10%, had equaled \$3.63 per hour, the index figure would need only to move upward one-half a point to permit a 1¢-an-hour increase.

In less than two minutes, without anything more than a pencil and paper,

an employer can figure how his wage scales stack up now and how they will be affected by any future change in the cost-of-living index he wants to imagine. He starts with the wage he was paying in January, 1950, and increases it by 10%; then he divides 181.5 by this figure. The result is the amount the index must rise to permit a 1¢ increase in his wage rate. It has already risen 3.7 points since the January, 1951, base.

For the employer worried about where his total wage payments are going, the new wage formula is only a partial guide. It is concerned solely with hourly rates. As the work week is increased and premium pay factors are added to straight hourly payments, the net weekly wage will mount steeply. Unlike its predecessor in World War II, WSB is not yet concerned with "take-home" pay.

• Few Strikes—Besides simplicity, the new policy has one other great virtue. It is a substantial guarantee that the defense program will not be impeded by protracted strikes.

In a period characterized by economic change and uncertainty, the chief cause of labor disputes is wages. The unanimity of industry, labor, and public members on WSB in voting for the new policy arises from their conviction that the policy will make wages as non-controversial as wages ever can be.

This does not mean that John L. Lewis, or every single employer in the

land, will accept the new policy and conform. But most of labor and industry is counted on to go along.

With wages taken out of collective bargaining, in effect, other potential strike issues should be less explosive. For example: Note what some big employers have done already to meet their unions on the union shop issue; the latest case is provided by U. S. Rubber Co. this week (page 38). Thus that second most important issue is being peacefully disposed of.

Some sticky labor relations problems will remain, of course. Utopia has not arrived. Labor leaders like Lewis, Murray, and Reuther will still be in competition to somehow get their unions ahead of each other. Controversies over workloads, management rights, and grievances will continue. But the overall climate should improve. The remaining part of this year, and 1952, are likely to be periods of relative labor peace.

- **Questions**—There are a number of questions still to be answered on how the new wage policy will work. All are being discussed now by WSB or are scheduled for intensive study. Chief among them are:

- **Pension and welfare benefits.** Shall future improvements in such programs be charged to wage rates and thus be deductible from permissible rate increases?

- **Retroactivity.** If the new wage policy is followed, not through cost-of-living escalator contracts, but by reopening a contract every six months for wage

adjustments, may a new wage rate be retroactively applied?

- **Productivity and other deferred increases.** How shall future wage increases already provided in contracts be held consistent with the new wage policy?

- **Selection of the index.** The Bureau of Labor Statistics now calculates two cost-of-living figures (BW-Mar. 10 '51, p112). At present they are not significantly different. Later, however, they may deviate sharply. Which of the indexes shall be the official standard—or shall either?

- **New fringes.** What accommodations, if any, should be made in the new wage policy for fringe demands not yet important enough to be taken seriously, but which may become pressing in the future (like, perhaps, the annual wage)?

No matter how these questions are ultimately determined, basic policy is now set. It makes the cost-of-living-index figure the most important single statistic in the economy. The short-lived experiment with wage control is over. The national price index has become the national wage index. It will almost surely become the governor of salary adjustments, too (the salary situation isn't settled yet).

Only psychic knowledge of where the price level will be six months hence will help management tell what its wage bill will be. The Administration has assured labor that no matter how hard inflation may pinch, the pay envelope will not suffer.

Call on Reserves...

... will go up this fall, with men in the junior executive level bearing the brunt. Draft will fill enlisted needs.

The military will step up its call of reserves this fall, and the demand will be mostly for men in the junior executive level—for officers, especially lower ranks, below age 35.

Most requirements for enlisted men will be filled by the draft. It is scheduled to hit the 80,000-men-per-month mark this fall.

- **Stymied**—The new reserve forces policy that Defense Dept. announced last week won't have any bearing on this. The policy is tied to Universal Military Training and won't go into effect for several years at least.

Actually, though Defense Dept. doesn't like to admit it, the manpower problem has the planners stymied. Reason is that the new draft law set the maximum required active service period for organized reserves—excepting specialists—at two years. Inactive reservists, if they request it, must be released after 17 months' post-Korea service. In addition, about 80,000 regular enlistments, due to expire after Korea, were frozen last July for another year.

That adds up to a total loss of considerably more than a half-million men by next July.

- **More Needed**—To add to the problem, new figures from the Joint Chiefs of Staff forecast a big increase over present total strength required. As of June 30, there were about 3.3-million men and women in uniform. Talk now is of jumping the actual strength to over 4-million, with a ceiling set at 5-million.

More specifically, here's what the services need:

- **Army** will probably call three more National Guard divisions. It may ask for another 6,000 junior officers before the first of the year.

- **Navy** will call up 8,000 reserve officers and 41,000 enlisted reserves. Program is to get 1,000 reserve petty officers per month plus 3,000 nonrated reserves.

- **Marine Corps** is currently over-strength. It will release about 6,000 reserve officers and 54,000 enlisted reservists. But it has an immediate need for 4,494 officers and 49,059 enlisted men to take care of attrition during the current fiscal year.

- **Air Force** is about 120,000 men short of its original goal for end of fiscal 1951. Most likely it will call a large percentage of the remaining 16 Air National Guard wings.



ENGINEERING KNOWHOW triumphed over nature, as California's Gov. Earl Warren (left) threw the switch that will bring water from northern California's

Shasta Dam to San Joaquin Valley. Warren and Interior Secretary Chapman (right) spoke at dedication of the \$400-million project—greatest mass water diversion ever.



UP AT BAT: Rep. Celler (center) pitches some hard, fast ones past Ford Frick (left) and Ty Cobb as Congress looks into antitrust angles of national pastime.

Baseball Faces Squeeze Play

Demands from Pacific Coast cities for major-league franchises and grumbles over contract clauses cause investigation. Historically, baseball has been considered exempt from antitrust.

After more than 40 years of operation in a hallowed vacuum, organized baseball is in for some probing that may put it into the same doghouse with other big business. Last week Rep. Emanuel Celler's monopoly subcommittee of the House Judiciary Committee began an investigation to figure out how the antitrust laws affect baseball and its players—if at all.

• **Deeper Effects**—Actually, the probe may have more far-reaching effects than that. For the national pastime has suddenly found itself under fire from a lot of directions. One is the so-called reserve clause. Under this, a player who signs with a club in organized ball is bound to that club until it releases him. A lot of players feel that they have been mistreated by this clause, and some are suing in the courts.

A second issue may turn out to be an even bigger headache to club owners after the committee gets done with it. That's the growing demand by cities along the West Coast to have major-league clubs. They point out that there have been enough population increases to justify that. But, they complain, their arguments have fallen on deaf ears—namely, the ears of the present major-league club owners, who will have none of it.

The third issue is vaguer and therefore further from solution—what to do about radio and television broadcasting of major-league games. The committee would probably prefer to skirt these problems altogether, since they involve all kinds of disputes between major and minor leagues, jurisdictional questions, and can even get into other sports.

• **New Territory**—All these questions have put professional baseball into a brand-new—and unfamiliar—situation. Almost from the time it was organized, baseball has been operating entirely under its own rules, with no control whatever by the state and federal laws that affect other businesses. In 1922, in a case involving the unsuccessful attempt to organize the Federal League, the U. S. Supreme Court went so far as to hold that organized baseball wasn't even a business.

Now those days are gone forever. Baseball, like any other business, finds itself entangled with the government.

The reserve-clause problem seems to be the most imminent. The possible antitrust angle on this is the fact that a player can be traded or sold anywhere in baseball without his consent. And he can be banned from the game if he tries to go somewhere his owner

club doesn't want him to. If players now suing for relief and damages win, the courts will grant injunctions against the clause.

• **Opposing View**—The argument on the other side has had some impressive witnesses—Ty Cobb; Ford Frick, National League president; Harry Simmons, International League official; and George Trautman, minor-league czar. They say that without the reserve clause rich clubs would get all the top players. Poor clubs would be left with even worse ball teams than they now have.

On the other hand, the group also heard Ross Horning, a veteran minor-league player. He presented a case against the reserve clause in terms of the great majority of bush leaguers who are suffering all kinds of hardships from operation of the clause. Rich clubs, he claims, generally wind up with the top players anyway. In fact, he said, they often have more top players than they need—yet they still prevent poorer clubs from buying them off their benches.

• **Franchises**—Not so pressing, but with more range and scope, is the problem of franchises and territorial rights. Cities such as Los Angeles, San Francisco, Milwaukee, Baltimore, and Houston want major-league clubs. There's plenty of evidence that they can support them. Besides, there's the chronic problem of the St. Louis Browns—the problem team of the major leagues for years.

St. Louis is a city that doesn't seem to be able to support two ball clubs. But no real effort has been made to find some place else for the Browns' franchise; instead, the team has had to be subsidized in many ways, including loans and gifts from other teams, in order to stay alive.

• **Expensive Job**—Yet under present major- and minor-league rules, the process of moving a club may cost millions. If a major-league franchise were to be moved to a city that had no ball club of any kind, it would require unanimous consent of club owners in the league involved and majority approval from the other league.

And if it were moving into a minor-league area, everybody up and down the line would have to O.K. it. Drastic reshuffling would be involved. Minor-league clubs would have to be moved, downgraded, and maybe even abandoned. That would mean money for damages. So it has been estimated that to move a club, say the Browns, to Los Angeles might cost the mover as much as \$10-million in settlement costs alone.

The result of this restrictive, almost prohibitive, system is that major-league baseball now has plenty of people in and out of Congress casting a fishy, antitrustful eye at it.



NEW SYSTEM

Air traffic controller picks up Navy flight 708 at 70 mi., guides him into . . .



2

. . . chief controller Jim Whittmore (left) on 20-mi. scope. Whittmore picks him up at 10:31 a.m., assigns him . . .



5

"Tower reports American 373 in local control." That clears the way for Navy 708. Whittmore, phone in hand, radios him to go into Anacostia on tower control.



6

10:46—"Navy 708 on final approach." "End control," says Whittmore.



OLD SYSTEM

Capital 416 over Arcola. "Stack him."



B

Sector controller marks 416's position on slip. Each slip represents a plane.



C

"No word from Air Force 276?" asks Whittmore. "Drop Capital to 4,500."



3 . . . position No. 8 on the scope, to land behind American flight 373.



4 Planes (represented by numbered blocks placed over radar pips) approach Washington in a spiral pattern. No. 1 and No. 2 have been shifted to tower control.

15 Tough Minutes—Easier by Radar

Under average instrument-flight conditions, nearly 1,200 planes will come under control of the Airway Traffic Control Center at Washington's National Airport in the space of 24 hours. That's when nobody envies the chief controller—the man responsible for handling the flow of traffic, both military and civil. His job is to see that all planes land safely and there is no danger of midair collisions.

The job is extra tough at Washington with National Airport less than a mile from the Navy's Anacostia Air Station and with Air Force's Bolling Field just across the Potomac. In addition, there's Andrews Air Force Base about seven miles to the east.

• **By Guess**—Until recently, the chief controller at ATC relied solely on

radio fixes and the pilot's qualified guess of his position. That required a wider spacing of planes to compensate for error. This in turn resulted in heavy traffic jams where planes were stacked on "race tracks" over radio beacons, sometimes for a couple of hours, before landing. Before moving any planes in the stack, the controller had to wait until the lowest plane was shifted to another check point.

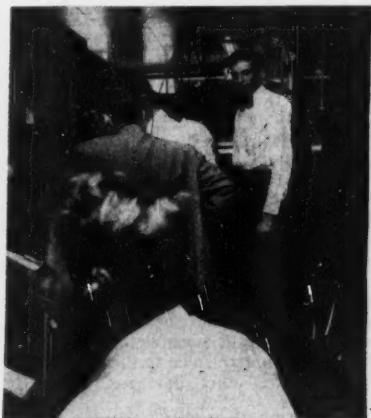
• **By Radar**—But a new system, put into operation last week alongside the old, does away with errors in judgment and cuts almost to zero the chances of midair collisions.

It's a radar control center—much like the Navy's task force radar setup—that sweeps about 5,000 sq. mi. around Washington. As soon as a plane ap-

proaches within 70 mi. of Washington, it's picked up on one of four sector-scanning radar scopes.

A controller sitting at this scope talks directly to the pilot, giving him headings that eventually bring him into a moving traffic pattern. When he gets within 20 mi., control is shifted to the chief controller who watches a larger scope that covers the entire local area.

• **Time Saver**—The chief controller keeps constant watch on the position of all planes in his area. They're marked by plastic blocks placed over the planes' radar pictures. Because he sees all traffic at a glance, there's no need for the controller to wait until a plane has landed before dropping other traffic into the approach area. This cuts stack-up time by at least 60%.



D "Drop traffic holding at Arcola 1,000 ft." Capital 416 is over Mt. Vernon.



E "Shift Capital to tower control. He's number three to land."



F "Where the devil is Air Force 276? He should be on Andrews range now."

For Armed Peace: A New Turn to

Mobilization cast itself free of the Korean War this week. The U.S. cut the last lines connecting rearmament with a short-run fighting emergency.

To assure a continued flow of consumer goods, the Controlled Materials Plan expanded for the fourth quarter to embrace all users of steel, copper, and aluminum. CMP also put into effect new controls over construction—a move to channel scarce materials to approved industrial expansion. To supply the tools for this expanded factory space, the heretofore stalled machine tool program got a double shot in the arm—special materials assistance and a new manpower policy.

These and other signs (the stockpile policy is one, page 134) indicate that Charles E. Wilson has swung mobilization finally and firmly away from the concept of a temporarily cocked gun to the concept of an expanding industrial power to be held in readiness for a showdown war.

I. Expansion

Expansion of basic industrial capacity is now getting top claim for critical materials. This is clearly evident from two actions last week.

- **NPA gave the machine tool industry, now recognized as the key to industrial expansion, a "super priority" on its own products.** It agreed to commandeer any piece of metalworking equipment—even one ordered by the armed services—for a tool maker who needs it. At the same time, chief mobilizer Charles E. Wilson ordered five federal agencies to do everything possible to channel necessary men and skills into the tool builders' plants.

- **NPA laid down new ground rules for scheduling all types of construction under the Controlled Materials Plan.** Essentially, they mean that the lion's share of scarce materials, especially structural steel, will go into new, "essential" industrial plant.

- **Write or Wire**—The new "super priority" for tool builders came in an order from NPA boss Manly Fleischmann. The plan will work this way:

Whenever a machine tool maker is unable to buy a piece of needed metalworking equipment, he may write, wire, or telephone NPA. Agency officials will then review the order boards of all tool makers.

When they find production of the equipment needed, they will order the producer to divert the machine from his original customer to the tool maker. The only restriction is that the tool maker must be able to demonstrate that the equipment will help him increase production.

In some cases, of course, the policy will result simply in allowing a tool maker to grab some of his own production from purchasers—like the military—who have priorities and allocations for machinery. One—of many—complaints of the industry has been that

its production was so thoroughly absorbed by priority orders that it could make no tools for its own use.

- **Manpower**—Wilson's action on manpower was the first of its kind since Korea. In his order to Labor Dept., Defense Dept., Selective Service, Federal Security Agency, and Wage Stabilization Board, he called for every effort to make more trained help available to the machine tool industry.

Specifically, Wilson wants Labor Dept. to consult with industry and union representatives, then: (1) determine what can be done in the way of further job breakdown, upgrading, standardization, training, and reduction of absenteeism; (2) conduct intensive recruiting campaigns; (3) attack community problems affecting manpower—housing, transportation, and the shift of workers from nondefense industries.

At Selective Service, the plan is to carry out the Wilson directive by deferring industry apprentices who have six months of training. Local draft boards are being alerted to "minimize" the induction of skilled machine operators. Federal Security Agency is charged with developing whatever training program Labor Dept. recommends. Defense Dept. will give special consideration to skilled manpower needs in calling reservists up for active duty. At WSB, a special committee will advise on how new wage-control rules for tool-and-die workers might ease the problem.

- **Blanket Control**—In its new construction order, NPA put every project in the country under CMP. It makes no difference whether the job is under construction now or just proposed.

From here on, owners and builders must apply to the appropriate government agency—designated for each type of construction—both for permission to build and for an allotment of controlled materials. The two go together: no permit, no allotment.

A loophole makes things easier for

the really small job. The little builder can start his project and self-certify his CMP orders to producers without first applying to the government—provided his job consumes less than the low amounts allowed by NPA for self-authorization.

- **Industry's Break**—Industrial jobs get a break on self-certification. For factory or plant construction, the owner or builder can self-certify if the job requires less per calendar quarter than 25 tons of steel, 2,000 lb. of copper, and 1,000 lb. of aluminum. But all other jobs (except two- to four-family houses) must apply for an allotment if the project will use more than two tons of carbon steel, 200 lb. of copper, or any aluminum at all.

Use of aluminum is completely prohibited—except for industrial jobs; but standard products containing aluminum can be installed without limit. All common job uses of copper are similarly forbidden, except for water piping in one- to four-family houses. The builder has to get approval before he can fabricate either aluminum or copper—even from stock already on the job—for any purpose now prohibited.

II. Civilian Goods

The inevitable made news this week. Defense Production Administrator Manly Fleischmann announced that materials for consumer goods, including automobiles and appliances, will be allocated under the Controlled Materials Plan. The new 100% CMP will start Oct. 1.

Allocations for all hard goods production—civilian as well as military—have been a virtual certainty ever since the controllers announced last spring they would try to leave consumer durables out of CMP.

- **No Way**—Mechanically, the so-called "open-end" CMP was too unwieldy for efficient administration. It provided the government with a close check on all production of basic shapes and forms of the three controlled materials—steel, copper, and aluminum. And it afforded an excellent accounting of the consumption of these metals by everyone except makers of consumer goods.

But there was no way the controllers could be sure that civilian goods producers made the most efficient use of—or even received—the supplies of metal theoretically left available to them after allocations to other producers were met.

- **Feelings**—Then there was the psychological problem; in the end, it put the controllers under more pressure than

Mobilizing

the mechanical difficulties. Consumer goods makers never liked the "open-end" CMP. It allowed them to use in 1951's second half a set percentage of their consumption of controlled materials in the period from January to June of 1950—65% for autos, 70% for other items. But they got no help in obtaining the metal.

A number of producers, particularly appliance makers, told Fleischmann they'd rather have an allocation ticket for steel, copper, and aluminum, even if that meant a further cut in the amount of metal they were allowed to use. At least, they argued, allocations would assure them of getting some materials.

• **Find a Seller**—The National Production Authority, which administers CMP, investigated these complaints recently and found considerable justification. Time and again during the last few months consumer goods makers have found their traditional steel suppliers too loaded with CMP-rated defense orders to meet other demands. The outlook for consumers goods in the fourth quarter is no rosier.

Metals allocations for refrigerators and kitchen cutlery won't end this situation. The mills will be busy with defense orders for months to come, and nondefense metal users will have to shop around to find open capacity. But an allocation should make it easier for a stove manufacturer, say, to place an order with a mill he never dealt with before.

• **Economy of Metal**—On the administrative side, there are positive gains, too. Applications for metals allocations (NPA had already asked consumer goods makers to file them) will give the controllers a lot of data they need to get the most production out of the least metal.

It's not just a matter of wringing the water out of consumer goods makers' metal demands, though that's a job NPA will tackle, too. The controllers figure the applications will help them and industry find ways of cutting corners on scarce materials.

For example, NPA officials already know that military needs will take a much larger cut of the copper supply during the first half of next year. So they'll ask the auto and appliance people to substitute aluminum, which won't be so tight, where possible. The controllers think the shift can be made in many electrical components, for instance. They'll find out for sure when they start dickering with industry people over allocations.

But, because of the prospective in-

crease in military demands for all metals, CMP probably will be used to cut back consumer goods production next year—at least in the first two quarters. The allocations tickets are certain to be less than 70% of 1950 metals use.

But all the same, CMP should guarantee fewer snarls en route to obtaining whatever metal is allotted.

Stock Option Plans: Anti-Inflationary?

Companies got a broad hint this week that employee stock option plans will get the green light under wage-salary controls—if they comply with the 1950 tax law.

At least, that's what observers gathered from some of the questioning at a three-day stock option hearing in New York. A panel headed by Dean Wesley A. Sturges of the Yale Law School heard a score or more company lawyers and officers testify about their stock option plans.

Sturges, J. Calhoun Baker, Ohio University president, and William W. Werntz, accountant, had been named by the Salary Stabilization Board to find out whether stock options are (1) compensation and (2) inflationary.

• **"Restricted" Options**—The panel wanted to cover all stock options. But the hearing boiled down to a study of just "restricted" stock options.

The restricted options have become popular because of a 1950 tax amendment. It provides that options for employees to buy stock at 85% or more of the market price get special tax treatment. If they meet all requirements, the options are labeled "restricted" and, for tax purposes, are considered capital gains, not income.

• **Forecast**—At one point in the hearing Dean Sturges seemed to be forecasting the committee's view when he asked a witness: Would it work any hardship if the SSB ruled that stock options are permissible that meet the requirements of Section 130A of the 1950 tax law (restricted stock options), but that any others would need individual approval by SSB?

The panel had plenty of evidence to support this view. All of the witnesses stressed these points: (1) Under present tax laws, most restricted stock options are capital gains, not income; (2) To get the full tax benefits the stock must be held for at least 2½ years, which couldn't have much effect on current inflationary pressures; (3) most plans call for cash or payroll deductions.

Synthetic Fuel

There'll be a domestic producer of liquid fuel from coal if F. Eberstadt & Co. builds its new hydrogenation plant.

Rearmament and the chemical boom have brought Interior Dept. a live prospect for its ancient dream of a synthetic liquid fuel industry. F. Eberstadt & Co., a Wall Street investment house, has proposed building a coal hydrogenation plant that would be privately financed, but helped by fast tax write-offs and a government purchase contract.

• **Both Sides Gain**—Both Interior's Bureau of Mines and Eberstadt insist that negotiations are far from complete. But the deal, if it goes through, has advantages for each.

Interior has been pushing unsuccessfully for a gasoline-from-coal program for years. The Eberstadt proposal would pay off now—if at all—on the basis of the chemical byproducts—benzene, toluene, cresols, xylenes, naphthalenes, ammonium sulfate. These chemicals are scarce, widely in demand, and highly priced today. But the plant could produce gas any time it's needed.

Eberstadt, on his side, stands to get early into a field related to its present investments. The company is manager and distributor of the Chemical Fund, an investment trust dealing solely in chemical shares. And Eberstadt & Co. organized Colchem Corp., through which its proposals have been made to Interior.

• **How Big?**—Best indication of the project's size is a Bureau of Mines report that talks in terms of a \$300-million plant to produce between 15,000 bbl. and 30,000 bbl. of product daily—about evenly divided between gasoline and chemicals. A 30,000-bbl. plant switched to chemicals only, could produce several times our 1949 output of cresols.

Within the chemical industry a good deal of skepticism remains—in spite of the lush markets existing for coal chemicals. But experts concede that coal hydrogenation might pay off if it could be assured of a continuing byproduct market as fat as it is today. It's just that, of course, which Eberstadt is looking for in its proposal that the government buy the output at a fixed price.

• **How Long?**—Construction of a hydrogenation plant would take two to three years. On that basis another Bureau of Mines development—synthetic fuel from oil shales—might beat coal hydrogenation into production. It's a simpler process and cheaper to build.

Crosscurrents in Prices

The general price level has been dipping steadily since February. When will the turnaround come? Apparently only after more excess inventory has been worked off.

People are beginning to wonder when prices generally are going to level out—or even turn up.

The general price level has been declining since the middle of February. In a few commodities, the drop has been severe. And merchants, in the effort to move goods off shelves and out of warehouses, often have cut much more deeply than replacement costs might seem to justify.

• **Mild Dip**—As a practical matter, though, wholesale prices aren't down much. The broad, somewhat slow-moving average compiled by the Bureau of Labor Statistics has dipped only 3.3% from its peak; earlier, it had risen about 17% from its pre-Korea level.

Now the view is spreading that more manufacturers are going to be raising prices than cutting them.

The outlook is encouraged by that portion of the new control law permitting prices to reflect a factory's cost increases (BW—Aug. 4 '51, p106). The No. 1 example is the request for higher prices by the big auto makers.

But the other side of the case may be stated in a simple question: How much of a boost will the market take now?

• **Inventory Bottleneck**—The key problem is the size of inventories. Retailers have done a pretty good job of working them down. And there's little doubt

that the outlook for sales later this year is good (page 112). But all the same, wholesalers' stocks probably are not at desirable levels yet. And finished and in-process goods have certainly piled up in manufacturers' hands.

Thus, though prices will go up on a lot of metal products such as producers' goods that rarely reach the retail level, it looks as if most manufacturers will have to move a lot of finished inventory before the market is ready for much in the way of price boosting. This, in turn, will have to wait on wholesalers' and retailers' buying whims—and price ideas.

• **Raw Materials Status**—Meanwhile, purchasing agents for factories using most things other than metals have pulled in their bids.

That's what has been responsible for some of the sharp weaknesses in basic raw materials. A sample is wool. The grade known as wool tops, traded in the futures market in New York, sold above \$4 a lb. as recently as last May; now the quotation is around \$2.50.

Some other prices have been humbled, at least in part, by government action. Cases in point are tin and rubber. When Uncle Sam pulled his bids, tin dropped from above \$1.80 a lb. to \$1.06 (BW—Aug. 4 '51, p110); rubber, which climbed to almost 90¢ a lb. late

last year, now is only a little over 50¢.

• **Crops Have to Be Considered**—Still another price depressant has been the prospect of large crops in this country. Cotton, in fact, has been subject to weakness on this score at the very time that the industry was suffering from an acute decline in demand for textiles. The result has been a tumble from 45¢ a lb. to about 35¢.

• **Other Factors**—In contrast to the sharp price drops in several commodities, you have virtually all the metals pressing on their ceilings. Steers also are bringing all the Office of Price Stabilization allows (and probably a bit more in unregulated markets). And hogs consistently have been traded at or near the year's high.

The net effect of these crosscurrents in primary markets has been to drop the volatile index of 28 spot commodities (also figured by BLS) by about 17% from the year's high. The 16 raw materials of industry included in this list are down by 19%. By way of contrast, the previous rise had amounted to 48% and 60%, respectively.

• **In the Balance**—Two or three things might happen to turn prices higher. Wars and rumors could be counted on to start a consumer stampede. Or, if enough manufacturers announced that they were going to Washington for higher ceilings, it might set off a buy-it-before-it-goes-up boom.

How soon consumer demand, by itself, will lift excess inventories off the market and stiffen the price structure defies timing. For months the public has been pocketing a rising income while shelling out a less-than-normal part of the money over retail counters.

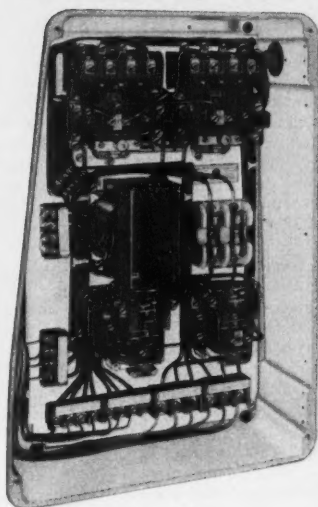


East or West, You Can't Fiddle While Oil Burns

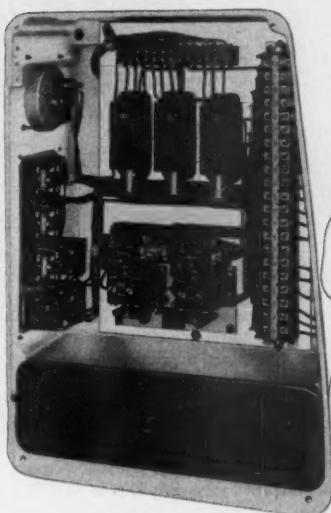
In Persia it took 12 days to subdue the fire at the Naft Safid oil well that had blazed for more than a month. American-born Myron Kinley used a 350-lb. charge of gelignite to control the flames. . . .

At the Wolfskehlen oil well 20 miles south of Frankfurt, Germany, an explosion ignited gas streaming from above the 3,000-ft. well. The U.S. Army has offered to use bombs to extinguish the 400-ft flames. . . .

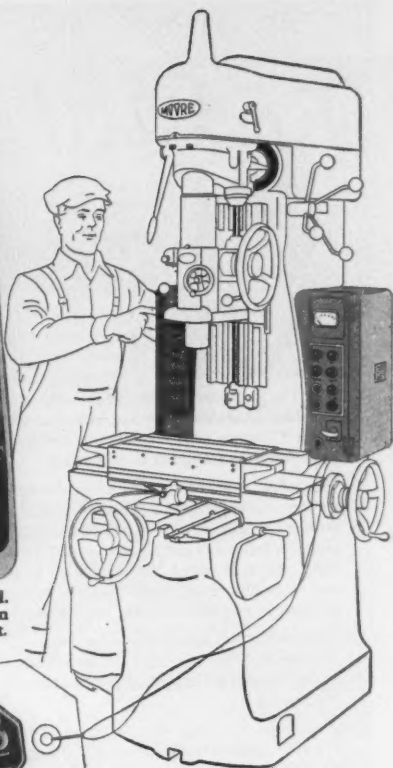
At home, firefighters trained their hoses on the roaring fire that broke out at the Hardiman Oil Co. plant at Sussex, Wis. Before being brought under control, flames burned out five oil storage tanks.



Close-up of left hand Control Panel for the Moore Precision Jig Borer, showing the Allen-Bradley Solenoid Contactors.



Close-up of right hand Control Panel. Note the A-B Oiltight Push Buttons on the left wall of the enclosing cabinet.



Factory Equipped
with
Allen-Bradley
Solenoid Controls



Moore PRECISION JIG BORER

with Two Allen-Bradley Sequence Control Panels



Open Type Bulletin 709 Solenoid Starter. Simple design; has only one moving part.



Bulletin 800T Oiltight Selector Switch with tandem contact blocks.



Bulletin 800T Oiltight Push Button with cylinder lock. Attractive in appearance. Safe.

This precision machine, made by the Moore Special Tool Company, Bridgeport, Connecticut, is factory equipped with two compact panels for sequence control.

Dependability and precision in operation of the electrical controls are a prime requirement for this type of machine. That is why Allen-Bradley solenoid switches and contactors are used. These units are equipped with double break, silver alloy contacts that require no maintenance. Their long, trouble free life makes them a decided sales asset to any motorized machine.

An outstanding group of control engineers are at your disposal to help you with your motor control problems. Call in Allen-Bradley engineers, today.

Allen-Bradley Co., 1332 S. Second St., Milwaukee 4, Wis.



ALLEN-BRADLEY

SOLENOID MOTOR CONTROL

QUALITY

Rockwell Report



by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company

IN THE LAST DECADE—and particularly since World War II—business management has become very interested in the theory of diversification. The fundamental principle is sound, and we have practiced it since 1927 when the Equitable Meter and Manufacturing Company and the Pittsburgh Meter Company were combined as the first step toward building Rockwell Manufacturing Company as it is today:

Carefully planned manufacturing diversification benefits customers, employees, stockholders and suppliers. It is a protection against extreme variations in the business cycle; it provides a pool of technical talent in engineering research, labor and public relations; it increases financial strength; it is an offset against localized conditions such as weather, transportation emergencies, material shortages, etc.; it permits the flexibility and close control of small business in combination with the long-range stability of larger companies.

Diversification for its own sake, however, can be a confusing and costly experiment. When unrelated and incompatible products, markets, experience and techniques are combined the result can be a hodge-podge of management nightmares.

Although Rockwell Manufacturing Company now consists of 17 divisions and subsidiaries, they have been added cautiously, some by purchase, some by construction. Our expansion since the first of the year illustrates the point.

First, we bought the Pittsburgh Valve and Fittings Corp., Barberton, Ohio, to supplement our established and growing group of valve and meter divisions. Then we built a new plant in Bellefontaine, Ohio, for more efficient operation of the Rockwell Register Corp., which builds Ohmer taximeters, fare registers and cash registers. Next we broke ground for a new plant in Tupelo, Miss., to better serve our expanding southern market for Delta Power tools and other products. Most recently, we have acquired Ohlen-Bishop Manufacturing Co., Columbus, Ohio, to augment our Delta tool line with Ohlen-Bishop saws and saw blades. All of them, you see, fit into an established pattern.

In a paint plant, valves take a beating. Frequent operation and the variety of substances running through the lines increase replacement costs, for when leakage starts so does valve deterioration. The Stewart-Mewry Paint Company of Chicago, plagued by the problem, ran a two year test of many types of valves, and now standardize on our Nordstrom lubricated plug valves. Leakage, they report, is a thing of the past. Nordstrom versatility is shown by a single Stewart-Mewry manifold that carries naphtha, linseed oil, cobalt drier, mineral spirits and various varnishes.

Our shipments during the first half of 1951 totaled \$50,041,000 which set a new six months' record that represented an increase of 66 per cent over the comparable period of 1950. Profit before taxes for the first six months' was \$8,986,000, an increase of 76 per cent over the same period for 1950. Earnings after taxes were \$3,264,000, an increase of only 6 per cent on increased shipments of 66 per cent, showing the impact of increased taxes. It is easy to see, but painful to relate, that we were able to earn only \$185,000 on additional shipments of \$19,876,000, or less than 1 per cent.

One of a series of informal reports on the operations and growth of the
ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.

For its customers, suppliers, employees, stockholders and friends.



BUSINESS BRIEFS

A big new titanium plant to be built at Henderson, Nev., will increase world production of the metal eightfold, according to Titanium Metals Corp. of America. The company, jointly owned by National Lead and Allegheny Ludlum, has scheduled its plant to reach an annual output of 3,600 tons by 1952.

A round-the-world jet airline is the goal of British Overseas Airways Corp. The government-operated airline predicts that it will have all-jet passenger service between London and Cairo by the end of this year, hopes to extend that service around the globe within five years. Key to the plan is the De Havilland Comet, a four-jet liner with speeds up to 500 mph.

Bethlehem Steel borrowed \$100-million from a group of banks headed by Guaranty Trust Co. of New York. The loan, to be paid off in two years, will be used to finance "a very substantial construction program" that Bethlehem has undertaken.

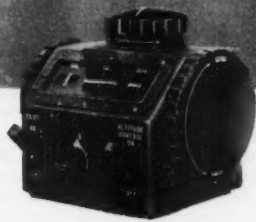
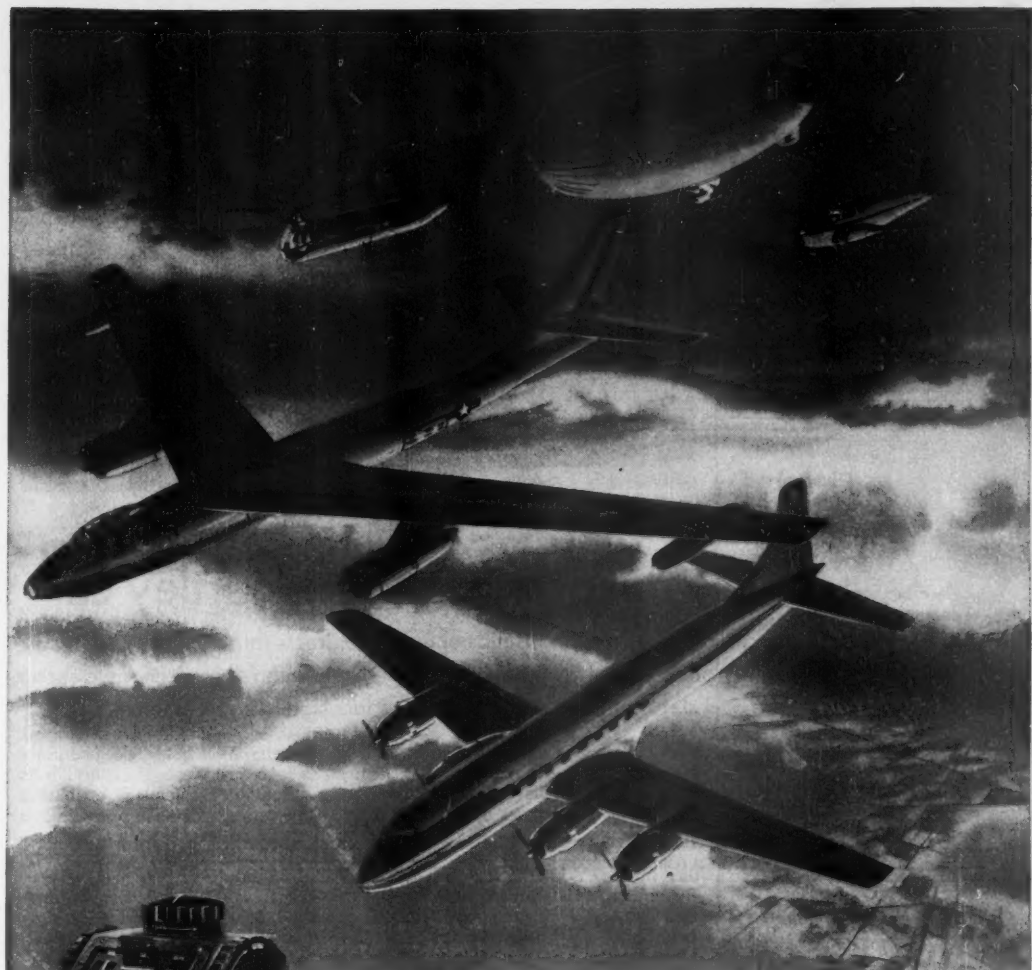
Flood damage closed two meat packing plants in Kansas for good. Cudahy Packing Co. said it would move its Kansas City operations, which account for about 8% of the company's total business, to Omaha. John R. Morrell Co. shut down a plant in Topeka that employed 1,200 workers.

BVD, one of the best-known trademarks in men's wear, was sold along with other assets of BVD Industries, Inc., to Paul P. Gelles and Sol Kittav, owners of Onyx-Superior Mills. BVD are the initials of Bradley, Voorhis, and Day—three men who founded the company 75 years ago.

The Ford Foundation's Fund for Adult Education will operate a Television-Radio Workshop to produce cultural programs. The workshop will first offer the shows free to commercial broadcasters, then sell them to sponsors. TV shows will be produced mainly on film. The workshop has \$1.2-million immediately available for this project.

New Hampshire has set up a \$4-million fund to promote business development in the state.

Natural gas pipelines must operate as common carriers if they seek right of way across public lands, Interior Dept. says. A previous effort to enforce this requirement against El Paso Natural Gas Co. (BW-Jul.7'51,p.25) was thrown out of court.



Automatic Ace OF THE AIRWAYS

**VERSATILE SPERRY GYROPILOT
ON JET FIGHTERS AND BOMBERS,
AIRLINERS, EXECUTIVE PLANES,
HELICOPTERS AND
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pilot to all types of aircraft is the result of 10 years' experience in combining precise reference systems with electronic rate circuit techniques and high response servos which accommodate all control situations from lighter-than-air ships to guided missiles.

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Grooms hair so Handsomely yet hair looks so 'Natural'



**Never
Plastered
Down
No Obvious
Odor**

Kreml is the hair tonic preferred among top business and professional men because it grooms hair perfectly yet never leaves hair obviously plastered down with greasy dressings. Nothing can compare with Kreml for distinguished, natural-looking hair grooming!



KREML Hair Tonic

**PREFERRED AMONG
MEN AT THE TOP**

LABOR



ARCH FOES Hubert Humphrey and Robert Taft are agreed on the need for . . .

Amending the Taft-Hartley Law

With thousands of union contracts threatened by strict construction of law, they want to eliminate union shop elections, clear up status of pacts made before leaders signed anti-Communist oath.

The Truman Administration is beginning to wonder whether it dare go on blocking congressional revision of the Taft-Hartley act until after the 1952 elections.

The question became an important one in the White House this week. Republican Sen. Robert Taft, co-author of the T-H law, and Sen. Hubert Humphrey of Minnesota, an ultra-New Dealer, agreed T-H should be modified.

They drafted a bill that would (1) validate some 5,000 union shop clauses that the National Labor Relations Board recently held to be invalid (BW—Jul. 21 '51, p. 32); (2) repeal the T-H clause that requires union shop elections; and (3) validate union certifications based on elections held before AFL officers formally complied with T-H on Nov. 7, 1947, and CIO officers on Dec. 22, 1949.

Another Taft-Humphrey bill, still in the drafting stage, would exempt the construction industry from union-representation elections. NLRB has found that the present election requirement is impractical for the building trades. Operations are too scattered and frequently don't last long enough for NLRB's slow-moving election procedures.

• **Reversal**—NLRB took care of much of the confusion that followed its decision invalidating the 5,000 contracts

by reversing itself last week. It decided it had not paid enough attention to the "equitable principles" established by the courts in similar cases. So it said it would not upset existing contracts based on the elections the board had held invalid.

• **Objections**—Despite the board's changed stand, Taft and Humphrey went ahead with plans to try to modify T-H. They got a cool reception—from the Administration and from most unions. Both agree T-H might be improved by the Taft-Humphrey proposals, but both Administration and labor face this dilemma:

• If the Administration consents to any tinkering with T-H—particularly by Taft—its "slave labor" election slogan might be reduced to nonsense. The Administration has been warming up that slogan to use in one more campaign.

• If the unions accept even a reform they want as much as this one, they probably will have to give up forever their dream of a return to the Wagner act. The unions have been insisting that T-H can't be improved by amendment, but should be scrapped entirely.

There's another problem, too: Can Truman dare risk letting Congress, particularly House members, have another crack at writing labor legislation? His leaders on Capitol Hill can't guar-

antee that the outcome won't be a new law with even sharper teeth.

• **Passive Resistance**—The Administration got itself in this dilemma by sitting on any Taft-Hartley reform after it failed to get its way in 1949. Then, with "outright repeal" as its original program, it saw Congress make up its own mind.

The Senate, with Taft in full command, wrote some dozen amendments generally easing some of the provisions most onerous to labor. The House, balking at even the Taft concessions, sent a less generous bill back to committee after Speaker Rayburn had used all his persuasive powers to win this questionable victory.

Since then, efforts by the maritime unions to get back their hiring hall rights—with Taft's approval—have been blocked by Administration leaders in Congress. And the efforts of the building trades to get out from under union shop elections because of the impossibility of conducting them have been squelched by Truman and AFL leaders.

The Democratic strategy after the summer of 1949 was to sit tight until 1950. Leaders frankly said they'd take Taft-Hartley repeal to the voters for a decision. What happened in '50 was not the way the Democrats planned it. So then the strategy developed—mostly by lack of any action—of saving T-H repeal for '52, when Taft himself might finally be the Republican candidate for President.

• **Change of Heart**—This was well and good so long as there was no real need to perfect the law. But the NLRB decision on union shop elections after the Supreme Court had upheld the non-Communist oaths is enough to make a lot of labor people decide that reform short of repeal is not so bad after all.

Richard Gray, president of the AFL's construction trades, is the man who got Taft and Humphrey to cosponsor legislation. He knew he already had backing of another moderate Republican, Sen. Irving Ives of New York, who long has wanted to do away with union shop elections. (The Taft-Humphrey bill retains this protection for minority unionists: If 30% petition to cancel the union shop, NLRB would hold an election.)

Taft and Humphrey are pushing for early action by the Senate labor committee on their bill. They argue there is no need for hearings and that Congress must act quickly.

But even if the Administration decides it must give in and let the bill be considered, whatever the risks of opening Pandora's box, Congress probably won't be able to vote the bill through before the end of this year, or maybe next spring.

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PRINTERS' PRESIDENT Randolph isn't kidding it now that typesetting is getting more and more mechanical—and can do without printers. It explains why . . .

ITU Starts Its Own Presses Rolling

Union's entry into the newspaper field is no threat to going dailies. It's a move to create jobs for its members.

Most labor leaders who heard of the project were shaking their heads in wonderment. There had been nothing really like it since the efforts to stop the march of private industry by establishing producers' cooperatives in the 19th Century.

Not that AFL's venerable International Typographical Union was joining the cooperative movement, or even striking a blow at the enterprise system. But its determination to go into newspaper chain publishing on a commercial basis as a device to protect its members' jobs was somehow reminiscent of the Luddite machine wreckers in England.

• **Nine New Dailies**—ITU has begun to edit, publish, and sell tabloid-size dailies in Monroe, La.; Texarkana, Tex.-Ark.; Meriden, Conn.; and Allentown, Pa. Within the next few weeks it will add five more papers to the chain: Springfield, Mo.; Lorain, O.; and Huntington, Beckley, and Charleston, W. Va.

Although the union professes to think it can make a profit on the undertaking—or at least break even—nobody is taking the new publishing venture seriously as a money-making enterprise. And although the union professes to be dissatisfied with the "editorial slant" of most newspapers, nobody looks on ITU's new papers as a serious propaganda move by labor.

Then why this big, expensive, unorthodox union activity? The only answer that rings true is: jobs.

Mechanization is cutting deeper and deeper into employment in newspaper composing rooms. Three national press

services are now feeding news into automatic typesetting machines—operating five circuits covering some 100 daily papers. By mid-1952 the press services expect to have more than 600 Teletypesetter clients.

• **Luddites vs. Progress**—Almost 150 years ago, the Luddites—organized bands of English craftsmen and artisans put out of work by new machine techniques—tried to beat the factory system by smashing power looms. It was a short-lived rearguard action. Within five years they were overwhelmed by tighter law enforcement and a flood of new machines.

Today resistance to mechanization doesn't take the form of attacks on machines. It's usually done subtly—with featherbedding, production quotas, and restrictive work rules.

The frontal attack being made by ITU is out of date—except that technology seems now to have outrun all the featherbedding that can be accommodated in a composing room.

• **ITU a Maverick**—In some ways, it was to be expected that ITU might lead the labor movement in such a radical—or, from another point of view, reactionary—experiment. Since Woodruff Randolph became president of ITU in 1944, it has been a maverick.

Randolph, now nearing 60, is a Missouri-born printer with a law-school degree—and a leader who has been, for years, a controversial figure in his own union and in labor circles.

For instance, when the Taft-Hartley act became the law of the land, ITU

was only one voice in the unanimous labor chorus condemning it, root and branch. But unlike other unions, which adjusted to life under the law while shouting imprecations at it, ITU virtually went to war against T-H.

Randolph fought the law on the speaker's platform, on the picket line, in bargaining conferences, and in the courts. Other leaders such as William Green and Philip Murray were doing pretty much the same thing, but they didn't let it interfere with business as usual. It was different with Randolph. He spent prodigious sums calling strikes on T-H issues, keeping them going, and paying for expensive litigation. And he is still at it.

It's the same in labor relations. Few other unions approach ITU's paradoxical relations with employers. On the local level, ITU chapels (shop organizations) and individual employers enjoy a close, friendly relationship that is hardly surpassed in any other industry. The national union encourages such a relationship. When, because of some local misunderstanding, a wildcat strike occurs, national ITU leaders more often than not back up the employer.

On the top level, few unions have such hostile relations with organized employers in their industry. Randolph and the American Newspaper Publishers Assn. have been at each other's throats for years.

ITU's new publishing venture is also part of the running war between ITU and ANPA.

• **"Defensive Weapon"**—According to Randolph, ANPA fought a losing battle to smash ITU in Chicago's big 1949 newspaper strike (BW—Sep. 24 '49, p. 110). Now, says Randolph, ANPA is "veering



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around to a fight on small locals—where the introduction of the Teletypesetter device has been the main weapon against our union."

Teletypesetting isn't new. It has been around since 1932. But until last April only a few newspapers had attached Teletypesetters to their linotypes.

In April Associated Press began servicing a 23-paper Teletypesetter circuit in the Carolinas. AP has added a Florida TTS circuit since then; United Press has opened TTS circuits in North Carolina and Oklahoma, serving 50 papers; and International News Service has opened an Ohio circuit.

Former teletype operators—members of the Commercial Telegraphers Union (AFL)—transmit TTS news. It's received by clients on automatic machines that (1) type out a monitor copy of the news for editors, and (2) perforate a tape to be fed into linotype machines equipped with Teletypesetter devices.

Teletype operators, with a little special training, operate the TTS equipment in the newspaper shops and punch the tape for local copy. A single linotype machinist can take care of a bank of TTS-equipped linotype machines; he's needed only if there are breakdowns.

• **ITU Fears**—Realizing that, ITU watched the new TTS system anxiously from the start. For years, it required newspapers experimenting with it to employ a union man for each tape-run machine—even though he might never touch its keys.

As long as papers had to depend on ITU men even in part, that strategy held back use of TTS. But developments made TTS more versatile. And ITU strikes showed publishers they could use TTS and get along without union typesetters. These things upset ITU's apperception.

• **Point of Attack**—In Allentown, for example, the Call-Chronicle Newspapers (circulation 80,000) adopted TTS for morning and afternoon papers three and a half years ago. A "substantial number" of ITU printers lost jobs.

ITU began putting out a four-page paper in Allentown about three years ago in competition to the Call-Chronicle combine. It has put out other papers in Meriden, Conn.; Jamestown, N. Y.; Colorado Springs, Col.; and other cities where publishers continued operating despite ITU strikes.

The new chain of tabloids will replace most of these small dailies and also add to the number. The tabloids will be uniform in format and in national and world coverage.

They will be put out five days a week—no issues on Saturday and Monday—and will run 16 pages. Each issue will carry about 15,000 words of news copy, as compared with the average small daily's 50,000 words. ITU says the small

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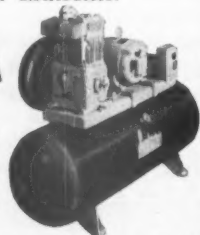


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dailies are too wordy; it promises "more news . . . than most papers carry"—boiled down into "easy to read . . . honest and responsible" news and opinion.

National and international news copy (including heads) will originate in a small Washington bureau. Local news will be edited by small local staffs.

ITU is shooting at a 10,000 circulation for each tabloid. It says it has no ambitions for metropolitan-area papers or big circulations.

• **Ads Come Slow**—The new tabloids are limited to a maximum 620 in. of ads daily. But like any new paper, they aren't running heavy with ads.

So far, the four tabloids are averaging just under 300 in. daily. They would be averaging considerably less except for one thing: The Texarkana paper, staffed with top-notch Texarkana ad men, is running with considerably more than 300 in. daily after a 615-in. first issue.

Advertising is of a general nature (very little of it is the usual "courtesy" copy seen in labor papers), but doesn't yet include department store, food chain, and national advertising. That's not unusual for new papers in cities with well-entrenched dailies; such copy comes slowly—if at all.

In keeping with the experimental nature of the ITU operation, the papers are operating with a uniform rate card.

Ordinarily, ad rates are set on a basis of circulation; ITU is figuring its rates on the basis of a breakeven operation with 560 in. of ads daily and an 8,000 circulation.

• **Not Labor Papers**—The tabloids, although published by a union, aren't "labor papers" in the usual sense. They are aimed at the general public, and are—ITU emphasizes—strictly commercial. They've aimed at a breakeven operation through advertising and circulation revenue.

While doing that, ITU says the papers will (1) provide jobs for TTS-idled printers, and (2) show that craftsman methods of printing a paper will beat anything TTS can do.

• **Unitypo Operation**—ITU's publishing ventures so far have been under the aegis of a subsidiary corporation, Unitypo, Inc., set up by ITU three years ago with \$50,000 capital.

Since then, ITU has sunk an estimated \$2-million into Unitypo—part of it for publishing costs, part for lining up paper and publishing equipment.

Critics of Unitypo have frequently questioned, within the union, the drain made on the ITU treasury by Randolph's pet project. Expecting more criticism at ITU's coming convention this month in Atlanta, Randolph has announced the publishing venture will be brought up for full debate.

6th Round Pierces 10% Formula

Rubber workers' 12¢-an-hour cost-of-living raise will probably set a pattern for negotiated "catch up" pay hikes in steel, coal, and other industries.

CIO's United Rubber Workers shoved the nation's sixth postwar round of wage boosts off to a brisk start last week. It signed with U. S. Rubber Co. and Firestone Tire & Rubber Co. for 12¢-an-hour raises for 58,000 workers. Of this, 3½¢ will be paid immediately, the remaining 8½¢ to take effect when the War Stabilization Board O.K.'s it. The new increase brought the rubber workers' pay to a level about 15½% above rates paid in mid-January, 1950.

Thus the settlement terms broke through WSB's original 10% raise formula—and possibly through the ceiling set under the board's new policy of allowing wages to rise as much as the cost of living (page 19).

More important, since it was a negotiated raise based on the continued climb of living costs, it is bound to increase pressure in steel, coal, and other industries for similar "catch up" raises.

• **Rubber Pattern**—URW's first settlement, with U. S. Rubber, set a pattern for the rest of the industry. In addition to the 12¢ wage hike, it gave the union

its long-demanded union shop clause (BW—Apr. 7 '51, p. 31). And it provided for triple-time pay for all work done on six paid holidays a year.

The contract runs for two years. It's reopenable on wages at any time, on 30 days' notice—an important clause in view of WSB's new policy, announced two days after the rubber settlement.

Firestone also announced a 12¢-an-hour wage boost for its eight CIO-contract plants, plus an additional 1¢-an-hour in lieu of "other requests and proposals" by the union in bargaining.

The amount of the settlements wasn't unexpected (BW—Aug. 4 '51, p. 40). Firestone and Goodyear Tire & Rubber Co. had just settled for 12¢ raises for CIO employees in Canadian plants. And for weeks industry people in Akron had been talking about an "inevitable" 11¢ to 14¢ hourly raise.

The question there wasn't whether URW would pierce the WSB wage ceiling—but how far.

• **What's Allowable?**—URW settled with major rubber companies last Oc-

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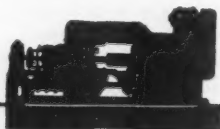


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tober for a 12¢ pay hike, about 7% to 8%—enough, the union said, to square wages with the cost of living at that time.

When the union opened new wage talks a month ago, it said wages were lagging behind "a continued rise" in the c-of-l index. Specifically, it argued that Bureau of Labor Statistics figures have risen more than 6% since October, 1950—from 174.8 then to a recent 185.5 c-of-l index. URW said it would need at least 10¢ an hour to catch up with c of l. It asked for an additional 5¢ as a productivity raise.

Employers countered at first by quoting WSB's 10% formula. URW's 1950 pay hike, employers said, left the union only about 2.3% under the 10% limit—or only about 3½¢ in wages. U. S. Rubber finally agreed to put the 3½¢ raise into pay envelopes, let WSB rule on the additional 8½¢.

URW planned to base its argument for the additional amount on (1) a claim that part of the 1950 raise of 12¢ went to correct inequities; (2) an argument that URW workers should be allowed to catch up with a "runaway" c of l; and (3) a claim that URW workers should be allowed "productivity" raises.

Last week's revision of WSB policy makes the union's fight for the additional 8½¢—or a large part of it—much simpler.

• **New Policy**—WSB announced that, subject to official approval of Economic Stabilizer Johnston, parties without escalator clauses will be permitted to re-open contracts "to make periodic adjustments to meet increases in the cost of living."

The board said the new policy doesn't do away with the 10% formula, but provides "other measures that can be taken if the 10% formula does not fill a particular need."

URW says that, by its figures, the entire new 12¢ raise can be allowed under the new WSB policy, when it becomes official. Industry people aren't so sure; they figure URW has bargained to a settlement 2¢ over the ceiling—and will have to get special dispensation from WSB to claim the entire 12¢.

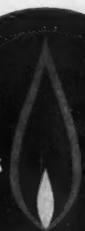
• **Steel Next?**—The rubber settlement and new WSB policy will increase pressure in the steel and coal industries for a quick wage boost. Quiet discussions on wages between U. S. Steel and Philip Murray, head of the United Steelworkers (CIO), have been reported—but never confirmed. USW is lagging about 7¢ behind other unions now on 1950-51 wage increases; it has had only 10.4% in raises since Jan. 15, 1950.

John L. Lewis can argue that his United Mine Workers is falling behind, too. While UMW got a 20% settlement in the spring of 1950, only 11¢ of it was current.

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Lockouts Are Legal

They're the employer corollary of unions' right to strike, Chicago court rules. But final say is up to the Supreme Court.

If a union can strike during contract bargaining, so can the members of an employers' association. Under Taft-Hartley, they have the same rights and powers as a union—even the right "to counter [union action] by suspending and locking out workers."

• **Corollary to a Strike**—The U. S. Circuit Court of Appeals in Chicago has established that principle of law, temporarily at least. It refused to enforce a National Labor Relations Board unfair-labor-practice order against the Illinois Wholesale Liquor Dealers Assn.—charged with locking out 700 salesmen.

The judges commented: "The lockout should be recognized for what it actually is: the employer's means of exerting economic pressure on the union, a corollary of the union's right to strike."

NLRB will appeal the decision to the U. S. Supreme Court.

• **Joint Action**—The case involved a dispute between the association of 35 wholesale liquor dealers and an AFL union of liquor salesmen. When association-union wage talks deadlocked, the union struck one of the 35 companies. The other 34 companies laid off their 700 salesmen, closed up for the duration of the one-company strike.

The union protested to NLRB. The board ordered all discharged employees reinstated with back wages, totaling \$300,000, for the time they lost. It held, as it had consistently in the past, that a lockout to destroy the effectiveness of a union, or to evade bargaining responsibilities, is an unfair labor practice.

While the companies "rehired" discharged salesmen after the dispute ended, they refused to comply with NLRB unfair-labor-practice order. The board went to court for an enforcement order, and lost.

• **What Effect?**—The association hailed its court victory as a sign that the power of management is now in balance with that of the unions. It said that the lockout "can now be used legally as an offensive weapon by employers—not just as a defensive weapon, or for protection against a strike."

It added that "when a deadlock is reached in negotiations, the employer now can say, 'We're through—take it or leave it. We're suspending members of your union until you agree.'"

The AFL union agreed that employers can do that and complained the ruling gives employers "a much



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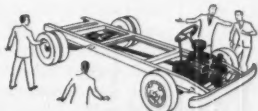
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The right units to move the load



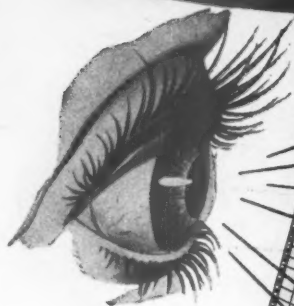
Load-moving units—such as engines, clutches, and transmissions, as well as types of rear axles and axle ratios—are engineered to provide ample power to move the load under specific operating conditions . . . and do it quickly, dependably, and at low cost.

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See your nearby Dodge dealer—let him show you the only trucks with glycol Fluid Drive (available on $\frac{1}{2}$ -, $\frac{3}{4}$ -, and 1-ton models). Call him and ask how you can get a Dodge truck that's "Job-Rated" to perform better on your job.

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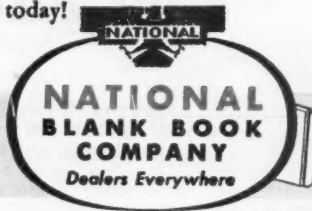
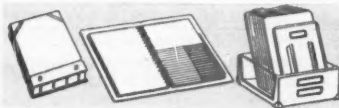


Green is the "go" signal for paperwork efficiency. Whether your office staff is large or small, restful Eye-Ease record-keeping forms and ring book fillers will

- (1) **increase accuracy and speed**
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stronger weapon" than unions have in the right to strike. Sol Lippman, attorney for the union, warned that "unions can now be broken. They not only will have to prepare for strikes, but also to withstand lockouts."

• **May Slow Unions**—Actually, nobody expects the court decision to set off a rash of lockouts or to stir trouble in multiemployer bargaining. As labor lawyers were quick to point out to clients in Chicago, Pittsburgh, and elsewhere, the decision is "persuasive though not yet determining." That is, the Supreme Court is likely to have the final say-so on how far employers can go in lockouts—so following the lower court decision might prove costly.

Meanwhile, unions may go slower on decisions to strike the leader, or the weakest members, of a multiemployer association. The possibility of a legal lockout by all the rest of the association is bound to have a retarding effect on the common divide-and-conquer strategy.

Nonunion Mines Give Benefits to Bar Lewis

John L. Lewis' United Mine Workers are out to sign up nonunion workers.

That's the story behind the Miners' Coal Co. 30¢-a-ton "Liberty Fund" and the development of a modern mine community near Madisonville, Ky.

• **Mechanized**—The new village, the Free City of Fies, gets its name from the Fies Mine owned and operated by the Miners' Coal Co., a subsidiary of Nashville Coal Co. Most of the village's nonunion miners work in the completely mechanized Fies slope mine.

Justin Potter, Nashville Coal president, set up the Free City of Fies plan and the "Liberty Fund" to improve living conditions—and help build goodwill. The company is financing and constructing modern five-to-seven room houses. By buying materials in carload lots and using its own AFL crews, the company can sell the homes for from \$9,500 to \$12,000.

Before credit restrictions went into effect, Fies miners could buy a house without a down payment, pay for it with monthly checks from the "Liberty Fund." Now that the government requires a down payment, the company is arranging to sell homes on the original basis to any miner who owns—or will buy—a lot to serve in lieu of a cash down payment.

• **Royalty**—Under the "Liberty Fund" plan, every miner gets an extra "Liberty check" once a month, covering his share of the 30¢-a-ton royalty fund.

The contribution is the same amount operators of UMW-contract mines pay into the union's welfare fund.

Workers with a sense
of pride . . .
a priceless
asset . . .



*Yours in the
Land of Plenty**

Find the man who cares about the quality of his work . . . a man eager to follow instructions, alert for new ideas, enthusiastic about his company —

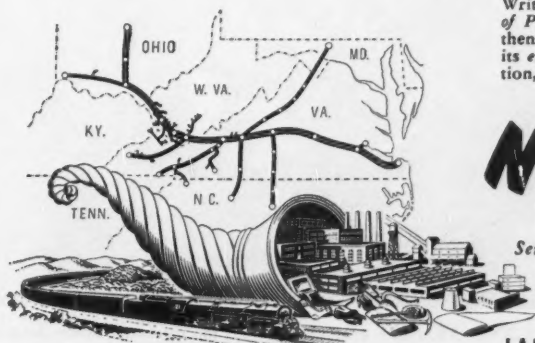
— and you've found a worker with a sense of pride . . . a man who will make money for himself and his employer.

Manufacturers in *The Land of Plenty* say their manpower personnel is a priceless asset . . . men and women who know how to work . . . many of them followers of their fathers in their trades . . . skilled and unskilled workers easily adapted

to different types of manufacture . . . "home-rooted" by nature . . . proud of their job . . . proud of their company . . . proud of the chance to pull with management.

If you're looking for *Workers With A Sense of Pride*, you'll find them in *The Land of Plenty*. For full details about any section of this great and growing industrial region, write or phone the Industrial and Agricultural Department, Drawer B-415, Norfolk and Western Railway, Roanoke, Va.

Write for a free copy of *Industrial Opportunities In The Land of Plenty*. Learn the general advantages of this section . . . then let the N. & W.'s plant location specialists tell you about its exact advantages for you — in confidence, without obligation, promptly and reliably.



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RAILWAY**

Serving the Six Great States of THE LAND OF PLENTY
*VIRGINIA • WEST VIRGINIA • OHIO
NORTH CAROLINA • KENTUCKY • MARYLAND

LAND OF PLENTY



Ready Mixes for Pie Crusts, Biscuits, and Muffins assure kitchen triumphs to the greenest bride. A few years ago these clever products didn't exist nor did the kind of packages that made them possible—many developed by Rhinelander.

Paper at home and afield



Fine meat off the range poses dozens of tricky packaging worries. For years the Packers have relied on the special properties of Rhinelander G and G* Task Paper to help solve the meat industry's many problems of protection and merchandising.

**Glassine and Greaseproof—the functional papers that do so many jobs well.*



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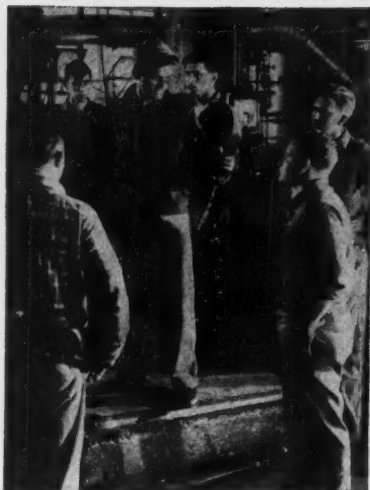
HOLLYWOOD PICTURES LABOR RELATIONS . . .



THE HERO AND VILLAIN of Columbia's pro-union "The Whistle at Eaton Falls" are a union man who acquires management responsibilities and an antilabor management man.



A UNION MEETING O.K.'s new machinery, despite the opposition strike demands.



A HOTHEAD stirs up trouble; he's heard that new machines will mean fewer jobs.



VANDALISM starts when the hero, backing new machines, is branded "Traitor."



PLANT BARRICADE erected by union hotheads doesn't stop workers returning to jobs.

The Movies Find Drama In Union-Boss Issue

There's always a lot of drama when a company tries to adopt labor-saving machinery that takes away workers' jobs (page 34). Louis de Rochemont uses it for a backdrop in a new, ambitious picture, "The Whistle at Eaton Falls." While he has hoked up a story around such a situation, he has handled the economic and social problems of technological change sympathetically.

Filmed in a small New England plant community, the picture is about a union

leader hired to run a factory that has been losing money. He finds that he must install labor-saving machinery—something he's rejisted in the past—or close the plant permanently; he has to buck antilabor management associates and hotheads in his union who call him a traitor. But the final fadeout leaves management and union in the traditional Hollywood clinch.

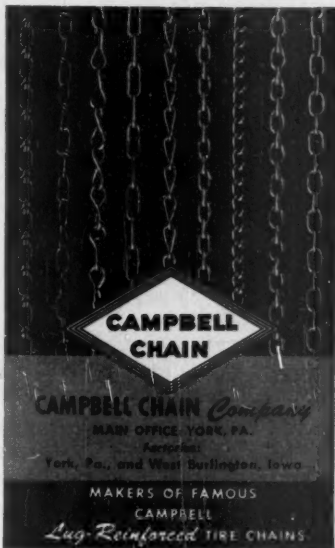
The picture is based on a great deal of research into labor-management rela-



Chain, of course.

Chain that is vital not only as a component of thousands of products in daily use, but for holding, hauling, and hoisting in plants where these products are made.

Campbell makes chain for every purpose. And every link is inspected before it leaves the factory. When you need chain, turn to Campbell for the right chain for your particular needs.



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HERE'S HOW TO GET IT...
USUALLY IN 3 TO 5 DAYS

COMMERCIAL CREDIT has a proposal for increasing working capital that is solving the problem for hundreds of manufacturers and wholesalers RIGHT NOW. If you are faced with the need for additional working capital for any business reason . . . expanding operations, spot cash purchases, higher payrolls, inventory, speeding Government and domestic requirements . . . this proposal offers many advantages without the usual disadvantages.

No fixed commitments

Under the COMMERCIAL CREDIT Plan, you do not sell stock, debentures or other capital issues. You do not make any long term interest or dividend commitments. We do not become a partner in your business or interfere with ownership, management or profits.

A continuing source

COMMERCIAL CREDIT funds are usually obtainable within 3 to 5 days from the first contact and are available for as long as you need them. They can be increased, decreased or eliminated whenever your needs dictate. You PAY ONLY for the funds you use . . . while you use them.

Only one reasonable charge

There are no preliminary fees, no commissions or other extras. Our charge is reasonable and is a tax deductible expense.

We can get started quickly, then function automatically, no matter where you are located. And our resources are ample, no matter how large your requirements. Just write, wire or phone the nearest COMMERCIAL CREDIT CORPORATION office below and say, "Send me complete information about the plan referred to in *Business Week*."



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financing offices in principal cities of the United States and Canada.

tions. There's a documentary flavor in the way the action and spirit of disturbed labor relations come to life. There are uncomfortable moments for labor and management men who see it—but some unions describe the picture as Hollywood's first pro-union movie.

Columbia Pictures is counting on management-labor support to help it sell what otherwise might be just another picture. It has plugged that idea at special previews, says "several large corporations" are interested.

No Strikebreaking

NLRB spells out what an employer can, or can't, require supervisory and plant-protection workers to do.

When CIO shipbuilders struck at Alabama Dry Dock & Shipbuilding Co.'s Mobile (Ala.) yards a while ago, executives, supervisors, and protection employees passed the picket lines unchallenged. There was the usual joshing, some cat-calls, but nothing more.

That's a pretty common pattern today, but it wasn't a few years ago. Then, brute strength was the order of the day when supervisory and plant-protection people tried to enter a plant. Unions fought to bar them because, presumably, they would be used in attempts to break the strike.

• **NLRB Rulings**—One strong reason for the lack of violence today is that an employer is limited somewhat, by law, in what he can require supervisory and plant-protection personnel to do. For instance, in recent decisions NLRB held:

• Supervisors can't be required to do rank-and-file work, if the work is intended to coerce striking production workers into returning to their jobs.

• Supervisors and plant-protection people can be required to comply with "reasonable instructions" designed to protect a plant from "imminent danger of destruction" due to a strike. But they can't be forced to abide with instructions that aren't reasonable.

• Plant-protection officers can't be required, against their will, to protect strikebreakers.

• **Loophole for Supervisors**—Since the Taft-Hartley law doesn't protect supervisors, NLRB's rulings on what employers can—or can't—require them to do are now largely academic. Most of the cases in which the board ruled dated back to pre-T-H days—when the old Wagner act covered supervisors, too. However, NLRB thinks there is one loophole that lets it act on supervisor discharges during strikes by production workers: The board feels it can



Serves the Electric Motor User in Two Important Ways:

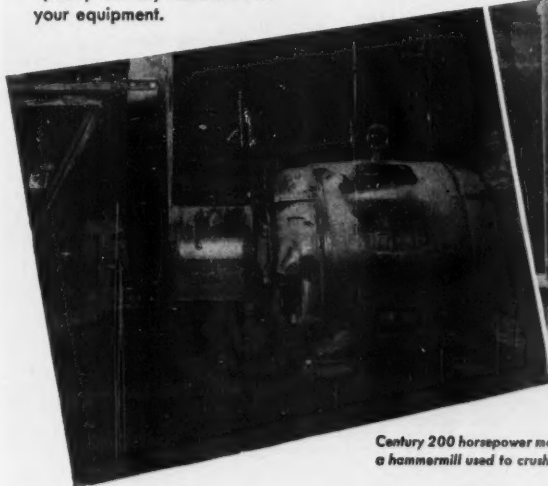
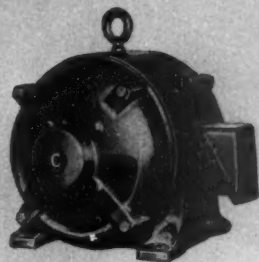
1. Century motors are designed and constructed for a long, dependable operating life.
2. Just as important—they are skillfully selected to match the operating characteristics of the many kinds of equipment they drive.

IN CENTURY'S wide range of types and sizes (up to 400 H.P.) there are available: 4 standard classes of starting torque characteristics—6 methods of speed control—constant and short time ratings—4 basic classes of frame protection against atmospheric hazards—a dozen methods of mounting the motor to the equipment—plus many special specifications to meet the requirements of the **BIG NAME** equipment manufacturers who use Century motors as a component part of their equipment.

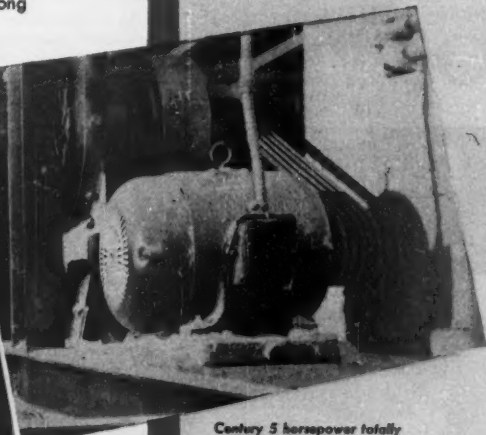
Teamwork with equipment producers gives you skillfully selected motors from Century's wide range of types and sizes... properly applied to match the performance characteristics of the machines they drive.

Both a properly designed and constructed motor, plus skillful application, are required to give you top performance and long life on the new ultra-modern production equipment.

Specify Century motors on all your equipment.



Century 200 horsepower motor driving a hammermill used to crush feed.



Century 5 horsepower totally enclosed fan cooled motor drives a mixer in a processing plant.

Century SERVICE Is Near Any **CENTURY** Motor Driven Equipment

Prompt Service is offered by CENTURY'S National Network of more than 200 Authorized Service Stations, supervised by 28 Century Sales offices.

1. Facilities for immediate exchange of most CENTURY standard ratings of standard construction are available at CENTURY Authorized Service Stations.
2. CENTURY Authorized Service Stations are qualified and equipped to service and repair any piece of CENTURY apparatus.
3. Genuine CENTURY renewal parts are available at CENTURY Service Stations, CENTURY Parts Distributors and at the factory in St. Louis.

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is celebrating its 50th year
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*** 2,800,000 C.F.M. ... 120 AIR CONDITIONING SYSTEMS...** showing 5 of the 324 Clarage Fans delivering conditioned air to manufacturing areas.



*** Upjohn**

A multimillion dollar project... Engineers and Builders, the Austin Company, Cleveland.



Fine Pharmaceuticals!...the making of over 700 different kinds has started in this great plant of the Upjohn Company, 10 minutes south of Kalamazoo.

Here much of the manufacturing...to maintain integrity of product...is dependent upon air conditioning. 120 complete systems handling 2,800,000 c. f. m. are installed.

CLARAGE
—HEADQUARTERS for Air Handling and Conditioning Equipment



APPLICATION ENGINEERING OFFICES IN ALL PRINCIPAL CITIES

Upjohn has had more than a quarter-century of experience with Clarage Equipment. It will may be that this was the deciding factor in selecting Clarage **HEAVY-DUTY** Fans for every one of the air conditioning systems operating in this new Upjohn plant. CLARAGE FAN COMPANY, Kalamazoo, Michigan.

Ford Picks Cotton...



This two-row self-propelled Rust Cotton Picker is made by Ben Pearson, Inc., will pick approximately two acres an hour. It is powered with a Ford "226" six-cylinder Industrial Power Unit.

● Solving a long-standing problem in efficient cotton production, mechanical cotton pickers have achieved wide use. In this application, as in many others in agriculture, Ford Industrial Power is used, providing exceptionally dependable, low-cost performance.

Ford Industrial Engines and Power Units are available in five models from 4-cylinder, 120-cu. in. displacement to V-8, 337-cu. in. displacement. Important uses of Ford Industrial Power, especially in defense work, include:

**PUMPS... STAND-BY POWER UNITS
COMPRESSORS... LIFT TRUCKS... WELDERS
GENERATOR SETS AND MANY OTHERS**

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**INDUSTRIAL ENGINES
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I am interested in Industrial Power for:

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bar the discharge of supervisors who refused to comply with company orders that would infringe on the rights of production workers covered by T-H.

• **Guards Protected**—The recent orders, in cases dating back to the 1946 steel strike, are just as applicable under T-H as under the Wagner act when applied to plant-protection people. Plant guards can't belong to production workers' unions—but are protected by T-H.

In NLRB's key decision on guards, the board held that Carnegie-Illinois Steel Corp. wasn't justified in firing 28 guards and watchmen in 1946 because they left their posts—without relief—to discuss whether they would work if the company hired strikebreakers. The guards said they considered protection of strikebreakers would be a "significant and unreasonable" change in working conditions. NLRB agreed.

LABOR BRIEFS



First chairman of the National Enforcement Commission—set up to enforce WSB controls—is Helen Humphrey, a government career attorney. Miss Humphrey has been associate counsel for the Economic Stabilization Agency, in charge of enforcement. Before that, she served with NLRB for 12 years.

• **A c-o-f-l raise** by North American Aviation last week added 1¢ an hour to the pay of 30,000 employees. The workers have received 10¢ in raises since October, 1950.

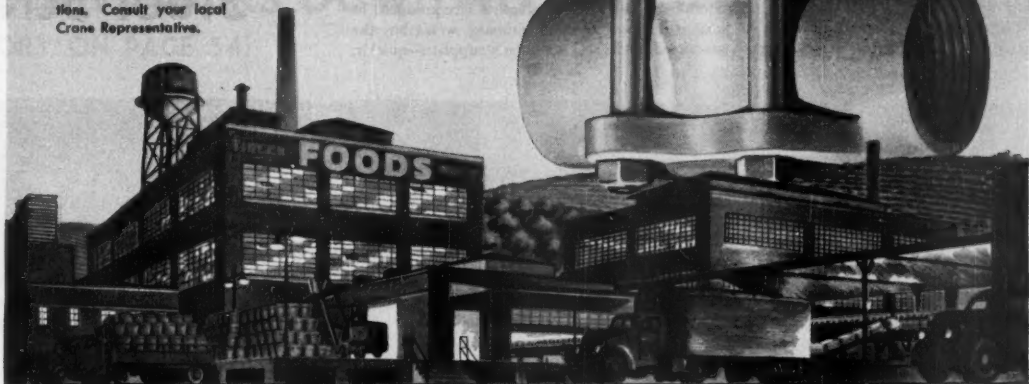
• **Plant guards** must work at plant protection at least half their working time. Otherwise, says NLRB, they lose guard status—and can join production workers' unions. The board ordered an election to find out if four Carborundum Co. workers in Niagara Falls want to go into CIO's chemical workers.

Better to Have Than Wish You Had CRANE VALVES

Whatever's ahead, Crane Quality gives greater assurance of dependable valve performance, with more durable protection against excessive valve maintenance costs.

*More CRANE VALVES are used
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For Food Processing and Packing Plants, for instance, Crane supplies all types of valves used in ordinary and specialized applications. Consult your local Crane Representative.



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STEEL



1 "I'll bet you a new hat," says Alan Hurt (left), sales manager of the Cleveland division of Solar Steel Corp., "that I can turn up at least 40 tons of dormant steel scrap just walking around your plant this afternoon." V. W. Fries, production vice-president of White Motor Co., takes him up on it. Solar, a steel warehousing company, won't buy the scrap, just will see that it gets to steel producers—preferably to Solar's suppliers—quickly.



2 "What about this idle drilling machine?" asks Hurt. "It needs new tooling," Fries replies. "We've got it on order." Hurt suggests scrapping the old tooling. Fries agrees. That's 1½ tons right there.

Steel Scrap



4 "What's this, a dolly?" asks Hurt. "It looks kind of rusty." Edward Pientka (center), a standards engineer at White who has just joined the scrap search, admits the dolly is junk and can go. "Swell," says Hurt. "Have you got any more like it?" "Well," replies Fries, "Come to think of it . . ."



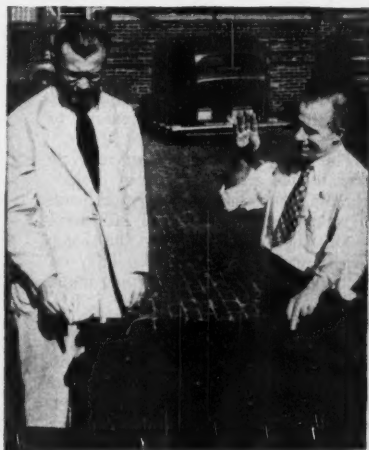
5 ". . . we do have a couple more piled over here behind the shed. Understand, we were planning to scrap these sometime; just haven't got around to it." At Hurt's urging, Fries promises that the dollies will be in the scrap dealer's hands for resale to steel companies within a week.



3 A storage room for old tools used in production of earlier truck models turns out to be a veritable scrap mine. As normal procedure, every six months White scraps all tools that haven't been used for four years. Out of the total collection, estimated at about 300 tons of steel, Hurt and Fries tag about 15 tons of tools that can go right to the scrap dealer now. Fries orders a closer check of the pile the next day.

Sleuth Tracks Down 40 Tons

(STORY ON PAGE 54)



6 "No you don't," Pientka protests. "These four-cylinder engine blocks may look rusty, but they're still good. We sell one now and then as replacement for a truck model we built in 1932."



7 The payoff is this 10-ton bending machine. White bought it in 1922, has had it for sale for six months; so far, no takers. Hurt gets Pientka's word that it will be scrapped if not sold by Sept. 1.



IMPREGNATED FIBER

sheeted for shoes or luggage or novelties

MOST women's shoes are built on and around an insole. Both the upper part of the shoe and the outsole are attached to this foundation piece which is finally hidden beneath the sock lining.

The insole has to be firm and stanch for this service and for another important one: it bears the responsibility of preserving the style lines that were fashioned on the wooden last. As if that were not enough, the insole must, if it can, shield the foot from the hurt of a pebbly walk, the heat of summer pavement, the wet of a rainy crossing — and it must be resilient with a cushiony comfort to keep the lady happy with her purchase.

Dewey and Almy's DAREX insoling materials have enjoyed the confidence of shoe manufacturers for twenty years and more. They are man-made from felted fibers impregnated with rubber. Based on chemical research, they possess the properties desired — including the primary property of true uniformity — and eliminate the undesirable properties that come along with the good in natural materials.

Actually, DAREX insoling is a class of material which, modified, becomes shoe welting, fabric backing or a base, ready for plastic coating, for artificial leather. Perhaps the case for your eye-glasses or a piece of your luggage started in our factory.

Can it do something for you in your factory?



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For additions to your present plant—or for new plants—Quonsets mean fast completion, economy of materials, adaptability to any use. Also, should plants need more expansion later, you can add Quonset to Quonset, according to the need.

Made of N-A-X HIGH-TENSILE steel, Quonsets provide non-combustible construction and permanence far surpassing less modern buildings. They require little upkeep—are easily maintained. Let Quonsets serve you now. Write us today.

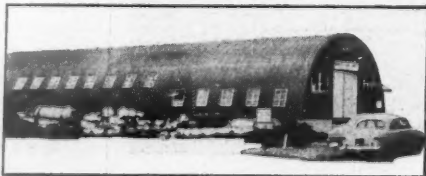
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NATIONAL STEEL CORPORATION



Scrap Sleuth (cont.)

What steel makers need more than anything now is scrap. Solar Steel Corp., a steel warehousing company in Cleveland, has devised an ingenious and effective way to help them get it (pictures, page 52). By itself, Solar won't be able to help the whole steel industry much, but its system is spreading to other companies; that will help.

• **Dormant's the Difference**—There are two kinds of scrap that steel makers use: production scrap and dormant scrap. Production scrap—the filings, borings, chips, and pieces that come off raw steel during manufacture—go back to the steel producer almost automatically now. But dormant scrap—old machinery that's idle and rusting in factories and farms all over the country—can make the difference between famine and feast if some way can be found to make people look around for this scrap and then get it to a scrap dealer fast when they find it.

• **Solar's System**—Solar Steel has found a way. It has deputized its 70 salesmen as "Scrap Sleuths." Last month and all this month, too, these salesmen will be calling on companies to help them find dormant scrap in their plants and get them to promise to sell it quickly. The sleuths follow up their visits with memos and phone calls to make sure tagged scrap gets to the dealer.

Solar doesn't buy the scrap. But as a steel warehouse, it's interested in seeing that steel producers—particularly its own suppliers—get what they need to make more steel.

• **One Plant, Five Carloads**—In the month that they have been on the track, Solar's Scrap Sleuths have got an impressive amount of scrap—over 2,000 tons of iron and steel—moving into dealers' yards and into steel mills. In addition, they have tagged about five times that amount awaiting removal to dealers soon.

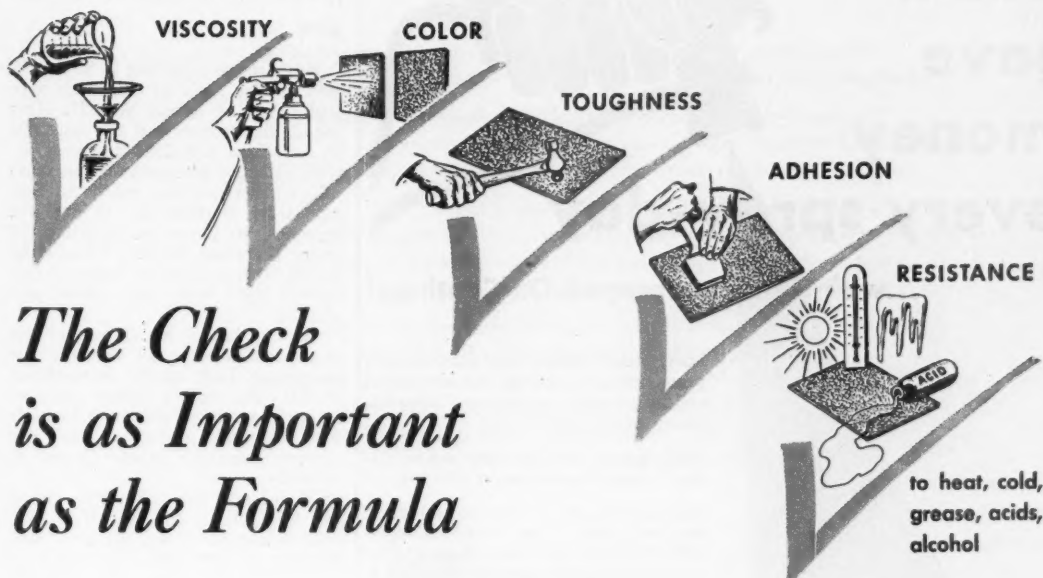
The most impressive scrap recovery to date was from a plant in Toledo where a sleuth uncovered five carloads of scrap—between 300 and 400 tons.

All August remains for the Scrap Sleuths to boost their total. They expect to double the amount they found in July.

• **Incentive System**—There's incentive for the Scrap Sleuths in Solar's system. To the three who turn up the most scrap during the two months goes a two-week paid vacation for themselves and their wives in Florida next winter.

Solar's president, Sol Friedman, turned a bright promotional spotlight on his one-company campaign. Ads announcing that Solar Scrap Sleuths would visit plants during the summer were run in trade magazines with national circulation.

In Making a ZAPON Finish...



*The Check
is as Important
as the Formula*

The first step in making an industrial finish is the right formula based on study of the user's problem on his own production line.

But in producing a finish that provides durable good looks at reasonable cost, the check is as important as the formula. That's why, at ZAPON, we have developed rigid test procedures to keep check on every step from raw materials, to finish in the drum.

This special care in production is another part of ZAPON *Service From Every Angle.*



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FINISHES**

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POWDER COMPANY**
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*For
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STAMFORD, CONN.
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**You'll
save
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every spray-day**

...with Flintkote Sprayed-On Coatings!

Many places around your plant require protection . . . against rust, dampness and corrosion caused by moisture, fumes, smoke and weather.

Look at your steel, masonry and insulation . . . from foundation to roof top.

And most places are best protected . . . not with paint, but with *coatings*—**SPRAYED-ON!** Flintkote Hydralt* Protective Coatings are asphaltic compounds in their most modern form . . . free from solvents . . . applied without heating.

You'll discover, too, that spraying is the efficient way to coat. It assures uniform coverage . . . reaches hidden pockets . . . and saves considerable time, therefore money.

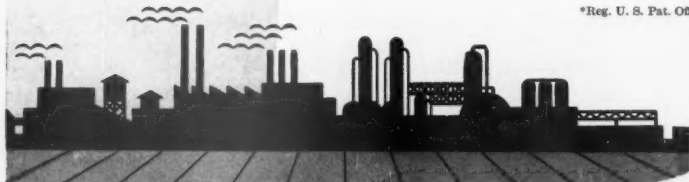
These specially formulated Flintkote protective coatings are economical and safe . . . will outlast any other form of bituminous coating exposed to weather.

Get full information about their use in protecting your equipment and plant.

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FLINTKOTE

Alloy Boosters

Tight controls and bigger nickel supply help steel industry toward its 10-million-ton-a-year goal.

Rearmament is pushing U. S. production of alloy steels up toward the very high levels of World War II. This month the industry had two assists in its drive for a 10-million-ton year:

(1) All alloy producers now are operating under melting schedules controlled by Washington. With NPA assuming the burden of supplying the scarce alloys and directing where every pound of output shall be shipped, steel-makers need worry only about production.

(2) Supplies of nickel, one of the scarcest of all alloying elements, are increasing. Last month International Nickel, the world's largest supplier, stepped up output 1-million lb. monthly over its record production rate. The increase came six months ahead of schedule.

• **Well Under the Peak**—At the end of the first half of this year, U.S. steel makers had turned out just over 5-million tons of alloy steel. That was a fat 20% above first-half production last year. But it was an annual rate well under this country's peak year—1943—when slightly more than 13-million tons were produced.

• **Stainless Leads**—Leading the spurt in alloys is stainless steel. Allegheny-Ludlum, the biggest producer, finds volume "way up over anything we've ever known." One expert figures stainless production this year may be 1-million tons. Last year's 832,309-ton output was a record.

Stainless is a heavy user of nickel and chromium—the two most-widely used steel alloying elements. Chromium supply presents no real problem today (BW—Jul. 28 '51, p122).

Most troublesomeness now are columbium and cobalt. Production of these metals is very low anyway, and they're the key elements in the high-temperature steels so vitally needed for jet engines.

• **Boron Moves In**—Another big help in this year's alloy steel spurt has been boron, which subs for nickel, chrome, and molybdenum. We used a lot of boron in the last war, but few steel users knew much about it.

Also contributing to increased alloy steel production are two series of alloy steels developed since Korea boomed rearmament. They contain only half the amount of critical materials that were used in the NE (National Emergency) steels during World War II.

Skilled help for your defense work is available!

● Today we can't offer immediate delivery on new machine tools.
But we do offer skilled help—our 45 Warner & Swasey Field Engineers.

If yours is a typical metalworking plant—with machines
averaging 10 or more years of age—chances are you need
this help to increase the productivity of your machines.

Perhaps one of our Field Engineers can help you.

His suggestions may be surprisingly simple—a new part, a different
tool, an easy-to-make adjustment. But when he leaves your plant,
your machines undoubtedly will be producing more than when he came in.

This is not a war-born service. The Warner & Swasey man
who calls on you was *trained* for this job. He has helped increase
production in hundreds of plants. His service is typical
of Warner & Swasey's long-standing policy of putting the
customer *first*—of working with each customer individually to
best serve his particular requirements.



YOU CAN PRODUCE IT BETTER, FASTER, FOR LESS WITH WARNER & SWASEY MACHINE TOOLS, TEXTILE MACHINERY, CONSTRUCTION MACHINERY

PRODUCTION

THREE HEADS ...

(on one machine)

are better

than

... ONE HEAD

(on each of three machines)



New Machines Solve New Jet Problems

The jet engine for planes was supposed to make airplanes faster than ever and to make engine design and production simple as ABC.

• **Not So Simple**—The prophets were right on the performance angle—but dead wrong on the simplicity. The jet brought a host of new metalworking problems, unlike any that reciprocating engines for aircraft had ever brought up before.

• **New Tools**—Pratt & Whitney has been struggling with these difficulties. This week P&W announced the development of five new machine tools and new machining methods to overcome the difficulties. The new tools may be the first in a whole new breed of special jet machinery with which engineers can work.

Even a layman's quick comparison of a jet or gas turbine with a piston engine shows some of the differences. In the jet he would notice the many blades and buckets for the compressor and turbine, and the large circular members and rings for housing and retaining the blades.

• **Newer Types**—Modern jet engines, like the P&W J-57 and Wright Aeronautical's J-65 Sapphire, compound the blade and ring problems of the earlier types. The older types, like the Rolls-Royce Nene, built by P&W, were of the centrifugal flow type—that is, their

compressors had a single row of blades. The new type has axial flow compression, with from 11 to 14 rings and rows of blades. Much higher compression is achieved, as the air passes through the series of rows of blades.

The trouble with centrifugal flow is that the only way to increase power is to increase engine size. But to get the higher power of the axial flow, you have to have several thousand blades in an engine, instead of several hundred for a centrifugal.

• **What It Takes**—The rings and blades give the miseries to production men. The rings are large, often up to 4 ft. in diameter. That means a large piece of equipment is needed to machine them. The rings are thin walled, with little rigidity of their own; yet jets call for tolerances of 0.0005 in. or less. That means precision machines to do the job.

Blades and rings must be of hard metals, to withstand high temperatures and the corrosion of hot gases. Stainless steels and an alloy of 80% nickel and 20% chromium are used. These metals are rough on cutting tools. Stoppages to replace dulled tools are frequent.

P&W began to learn the facts of jet life when it took on the relatively simple Nene. But production quantities were small. The company got by

with standard production tools, although efficiency was low. The real lesson came about a year ago when P&W started making the axial-flow J-57. The old tools flopped on two counts:

• The military demanded real production quantities of the J-57's.

• The shift from centrifugal to axial types multiplied blade and ring problems many times over.

P&W realized it needed tools that were at once suited to tough machining, capable of volume production, flexible enough to handle stainless steel rings of varying dimensions. Yet the company reasoned that the jet field is still fast-moving. It couldn't afford to settle on highly specialized tools suited only to a particular part on which design had been frozen—like the transfer machines used by automobile makers.

• **No Interest**—Machinery of the type required isn't designed and built overnight, or cheaply. At first, the machine tool builders weren't interested in such a venture. They felt the market was limited, that their efforts might lead only to the sale of two or three machines. So P&W put up much of the ante and inveigled several tool builders into development programs. The result is the five machines, which are new to jet engine production.

P&W isn't keeping the tools under

ANOTHER **AMERICAN Brake Shoe COMPANY** PRODUCT THAT CUTS THE COST OF WEAR

Sprocket life tripled by Hardfacing

Repair instead of replace . . . on the job . . . at less cost

The sprockets that give 20-ton bulldozers their herculean push take a hard fisted beating as they slam into the track that moves the monster. Add to this destructive action, the gouging and cutting of sharp edged sand and stone, and you have wear at its worst.

Hardfacing . . . the laying of a hard, tough, wear-resistant metal surface on a softer base metal, by gas or arc welding . . . is a cost-cutting answer to this wear problem. It makes parts hard, yet tough, to resist the wear of impact, abrasion, corrosion and heat.

Amscoating is a method of hardfacing that often reclaims such worn out

parts for less than original cost. It lengthens the life of old or new parts often beyond original service. Amscoating can be done in the field and on the job quickly and cheaply by any competent welder.

Amscoating is based on the know-how derived from thousands of practical field applications, with directly traceable savings in lower maintenance and replacement costs, and fewer shut-downs. Our Amsco engineers will welcome the opportunity to apply their experience to your hardfacing problem. Write Department A for literature about Amsco Welding Products.



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Reaches every prospect? Stays on the job all day,
every day?

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"... They felt the market was limited ..."

JET MACHINING begins on p. 58

wraps. It feels that jet engine builders like Allison, General Electric, Westinghouse, and Wright Aeronautical may find them useful. And they could be a big help to the newly launched jet production programs by automobile-maker licensees like Buick, Studebaker, Packard, Ford, Nash, and Chrysler. Already a number of machine tool builders have beat a path to P&W's door to take a look.

The machines and methods have three features in common:

- They speed up production by combining operations and improving machining quality.
- They can handle a large variety of shapes and sizes of parts.
- They're actually cheaper than the standard machines that might be used to do the same jobs.

I. T-Bed Lathe

It takes a large lathe with a 60-in. swing to machine large-diameter rings and discs: But such a lathe is too powerful. P&W says it wanted a large car-wheel lathe with the sensitivity of a tool-room lathe. What its designers came up with is a right-angle chucking lathe with a T-shaped bed. The section on which the carriage is mounted is at right angles to the lathe center line. The carriage has a cross-slide that can move parallel to or at any angle to the center line, making it possible to do facing, straight or taper turning, or boring.

The T-bed lathe is easier to load and unload than standard lathes, because it doesn't have the conventional long bed beyond the work piece. The operator can stand much closer, to follow the cutting and measure the work as it progresses. P&W says that feature stops an unsafe practice; operators used to climb up on a lathe to watch and measure the tool's cut.

The new lathe occupies about half the floor space normally needed by a standard 60-in. swing lathe and is cheaper. It has uses in other industries, too. Lodge & Shipley, who built the lathe for P&W, already has sold 30 of them.

II. Three-Headed Drilling

Because the large circular sections of a gas turbine are bolted together, holes have to be drilled in them. Some have as many as 196 holes. Multispindle drilling machines are too specialized to handle the variety of patterns. And P&W says that it hasn't enough floor

space to do the job on single-head radial drills.

So P&W designed a three-head adjustable-spindle drilling machine, built by New Britain Machine Co. (picture, page 58).

This machine can handle practically any drilling pattern without costly fixtures and drill jigs. It drills, reams, and countersinks at one setup of the part. In fact, it can do these operations simultaneously, doing almost three times the work of a single radial drill. P&W intends to add a fourth head to the machine.

III. Individually Toothed Broach

The pine tree-shaped roots on turbine blades normally are milled first on one side and then the other. P&W has gone to broaching both sides of the root at one time with a multitoothed broach. And P&W inserts individual teeth in the broach body instead of having a number of fixed teeth in each section. This means that each tooth can be used up completely. Blade material uses up cutting tools awfully fast. Hence getting full use of each tooth can mean a big saving in high-speed cutting steel, which contains the critical tungsten and cobalt.

The next step proposed by P&W is to use carbide tips on the individual broach teeth. That should put a big dent in down time for sharpening and replacing cutting tools.

IV. Combined Lathe, Grinder

Normally, the large-diameter rings for jet engines would be machined on one lathe or boring mill, and then finished on a grinding machine. To save a setup step, P&W mounted the turning slide from an engine lathe on the bed of an internal grinder. Now it's possible to do both machining and grinding without removing the part from the chuck. This makes for greater accuracy and saves money, too. A lathe that could swing a ring up to 48 in. in diameter would be quite costly. All that this job needs is the delicate touch of a smaller engine lathe, which the added cross-slide furnishes.

V. Flexible Turret Lathe

P&W doctored up a conventional turret lathe by adding a large number of tool-holding screws. That allows positioning of a wide range of tools so that discs of many sizes can be machined.

The various cutting tools are positioned in the holders by templates that duplicate the desired disc contour. The company feels it can machine 16 different disc sizes with this machine, using assorted templates.



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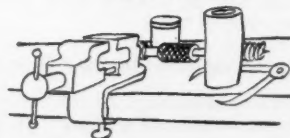


EARLY in the present century, many fine small companies were engaged in the business of making post holes.

They made their post holes carefully by hand, just as each customer ordered them.



Each company made hundreds of different kinds of post holes. And each wanted its holes to be as different as possible from the holes made by all the other post hole companies.



1

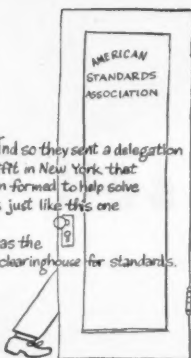
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This clearinghouse investigated

the post hole situation and found that lots and lots of people wanted a national standard.

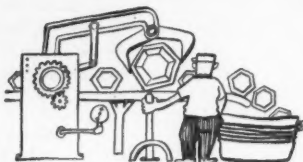
ABOUT IT. And so they sent a delegation to an outfit in New York that had been formed to help solve problems just like this one.

It was the national clearinghouse for standards.



5

6



HIS PRODUCTION LINE began to move faster and smoother. It had longer runs with fewer changes.

because THERE WERE FEWER & SIMPLER TYPES TO MAKE.

HIS SET-UP TIME, TOOLING, INSPECTION, TRAINING OF WORKERS AND RAW MATERIAL REQUIREMENTS WERE ALL SIMPLIFIED.

HE WAS ABLE TO KEEP THE FACTORY BUSY IN SLACK TIMES BY MAKING STANDARD POST HOLES FOR STOCK.

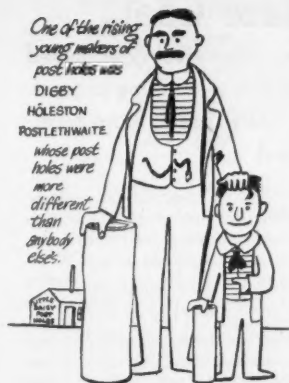
DIBBY POSTLETHWAITE WAS NOW KNOWN AS THE GRAND OLD MAN OF THE POST HOLE INDUSTRY.



HE THOROUGHLY APPROVED WHEN HIS COUNTRY BEGAN TO RE-ARM TO PROTECT ITSELF.

9

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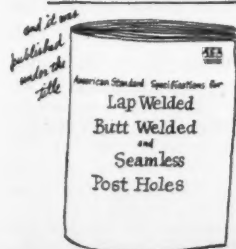


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THE BOARD OF REVIEW OF THE STANDARDS CLEARINGHOUSE APPOINTED THE NEW STANDARD:

IT BECAME THE 1,234th AMERICAN STANDARD



PART 3

—a new, real life

DIGBY gradually began to adopt the new post hole standard in his factory



Like the other post hole makers, he was willing to follow it because he had helped to make it himself.

7

8

It's a Matter of Standards

It's good business to standardize some of the design in your products, whether you make sky hooks, left-handed monkey wrenches, or post holes like Digby Postlethwaite (above).

To prove this American Standards Assn., Inc., has published a whimsical story showing the troubles that confused the post hole industry. Postlethwaite, president of Little Daisy Post Holes, Inc., and his competitors, were once up to their necks in post holes of countless shapes and sizes. But after the industry standardized them with the help of ASA, its products were cheaper to produce, market, and replace.

American Standards figures that comic relief is a good way to recruit

real-life industries for its membership of 110 different fields. Although the majority of industry accepted standards long ago, a lot of top management, ASA feels, still isn't convinced that they pay off. So ASA's booklet exaggerates the truth.

ASA is pushing for wider adoption of standards, too, because they indirectly help the accelerated defense program. New designs of parts for jet engines or electronics call for some conformity among their dimensions and tolerances. That makes the parts easier to duplicate when their production is spread out among several different firms. And eventually many of those standards will wind up in peacetime production.

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Surface Coal . . .

. . . can rival deep-mined coal with new washing process. Result: better use of more accessible coal.

Two years in construction, costing \$5.5-million, a new coal preparation plant started pouring out its first runs last week at Georgetown, Ohio (BW—Aug. 4 '51, p. 28). It belongs to Hanna Coal Co., a division of Pittsburgh Consolidation Coal Co.

With an hourly output of 1,275 tons of clean product (or 1,500 tons of raw coal) the Georgetown (Ohio) plant is the largest of its kind. What's more, it proves the feasibility of treating surface coal to rival deep-mined coal in quality. This surprises even some Hanna men who are steeped in deep-mine experience and who had some reservations about the project.

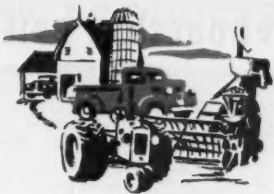
That angle adds up to a new place in the sun for surface-mined coal, which is easier to recover than that deep in the ground. Coal experts figure that they can recover about 95% of the available coal in surface mining, compared with 55% for stuff that is deep-mined.

Hanna sells its coal by the million btu. rather than by the ton. With the new plant it achieves an upgrading in heat values from 10,000 to 13,000 btu. per lb. And by taking 10% to 30% of the refuse out of the coal, the plant cuts the ash content of the clean product to 7% or less.

• **Extra Operations**—This boost in quality comes from the added processing operations that were designed into Hanna's plant. It has three separate washing stages and three distinct drying steps. Until now, coal preparation plants have used one or two washing and drying systems.

Coal for the plant comes directly from Hanna's six surface mines around Georgetown, plus some of its underground mines in Ohio. To squeeze the last btu. out of the raw product and to get 100% recovery from it, oversized lumps that contain streaks of impurities are first reduced to smaller lumps. The impurities are then removed either by hand picking or by a flotation process. And finally the coal is sorted for size.

At the output end of the plant, loading facilities can handle at least 800 gondola cars. A combination of mixing conveyors and storage bins blends a carload to any proportion of the four popular sizes of coal, according to the wants of the customer. After a car is loaded—one every two minutes—it's weighed electronically.



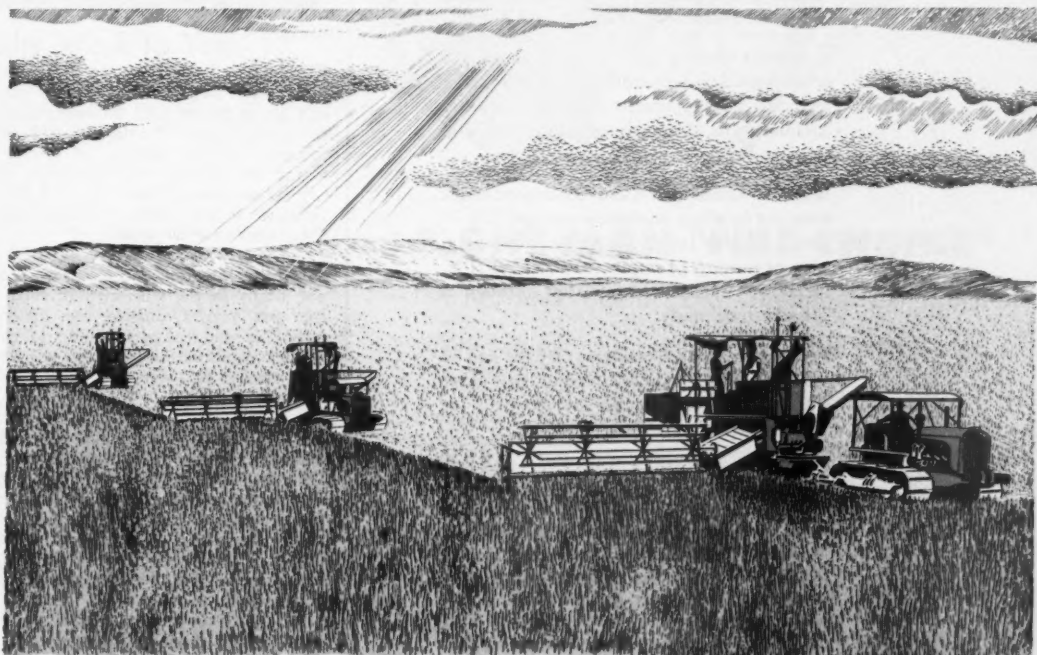
Feast or famine?

Whether America eats heartily or sparingly depends in no small measure on the success of the harvest. And that, in turn, is largely dependent on an army of vital machines, many of which are equipped with RAYBESTOS-MANHATTAN PRODUCTS—combines with R/M V-belts; threshers with R/M flat belts; tractors, trucks and cars with R/M brake linings, clutch facings, radiator hose and fan belts.

Millions who make a better living in agriculture through this mechanized equipment rely on R/M products because of confidence in their dependability. This same assurance is shared by the man-

ufacturers who make the equipment, as well as by thousands who sell and maintain it.

But by no means are R/M's four great plants and laboratories limited to these products for the farm. Almost every industry, indeed almost every individual, is served by something R/M makes—brake linings and clutch facings; asbestos textiles; mechanical packings; abrasive wheels; hose of every description. If you have an automotive, agricultural or industrial need for a specialized asbestos or rubber product, consult an R/M representative. Raybestos-Manhattan, Inc., Passaic, N.J.



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PRODUCTION INCREASED 122%

LABOR COST REDUCED 36%

Early in 1951, Trundle engineers were called in by a manufacturer of footwear specialties. The company was far behind on delivery schedules. No additional space was available to expand production operations.

A Trundle study quickly revealed three basic needs—greater standardization in production methods, rearrangement of the facilities and equipment to eliminate waste motion, and training of employees and supervisors.

Within a month after these recommendations were put in effect, production was up 122%—labor cost was cut 36%. At the same time, average earnings of employees increased 21%, based on standards established through a Trundle time study.

For Profit-minded Executives: By the end of 1951, the reduction in direct labor costs alone will amount to 12 times the fee paid for Trundle service.

Trundle works as a "team" with your executive staff — on problems involving Management Methods, Marketing, Manufacturing, Engineering Research, Industrial Relations. May we give you more information on whom we serve, and how we might serve your company? Write or phone The Trundle Engineering Co., 908 Bulkley Bldg., Cleveland 15, Ohio.

THE TRUNDLE ENGINEERING CO.

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PRODUCTION BRIEFS

Wear on tire treads is measured by mixing radioactive phosphorus with the rubber compound at B. F. Goodrich's research center. X-ray photos of the "hot" tire tracks show the number and size of the particles worn off the tire.

Diesel oil extracted from shale in the Bureau of Mines' plant near Rifle, Colo., is running a switch engine on the Denver & Rio Grande Western RR. The oil has about the same effect as standard diesel fuel on engine wear and carbon formation.

Shorter supply lines are the reason Abbott Laboratories, processor of isotopes for the medical market, is moving from North Chicago, Ill., to Oak Ridge this summer. Abbott hopes to stretch the life of its products, which lose some of their radioactivity when flown from Oak Ridge.

Chemical modification is the angle that Agriculture Dept.'s New Orleans lab will use in hunting for improved ways to fireproof cotton for the Army Quartermaster Corps. Instead of impregnating the fabrics with chemicals, it will try breproofers that react with the cellulose of the cotton, forming new fibers with new properties.

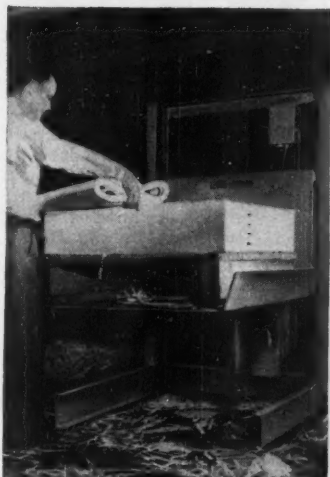
A lightweight storage battery, worked out jointly by the University of Michigan and Army Ordnance, uses plated instead of solid lead parts. Under tough climatic conditions, it can stand idle for long spells, yet start an engine instantly.

For fuel control on jet engines, United Aircraft Corp.'s Hamilton Standard Division has developed an automatic device that combines a tiny electronic brain and a hydro-mechanical movement. By sensing variations in turbine speed and correcting the flow of fuel, it relieves the pilot of a few complicated adjustments.

Finding new products for latex rubber is the job of du Pont's latest addition to its rubber research laboratories at Deepwater, N. J. Slated for early tests are shoe adhesives that might eliminate nails and stitching, fire-resistant sponge for upholstery, and paper that stays strong under water.

A diesel rail passenger car is being designed by Mack Trucks, Inc., and the New Haven R.R. The car is to be built at Mack's Allentown (Pa.) plants. It will have a 220-hp. supercharged diesel engine and will accommodate 45 passengers.

NEW PRODUCTS



Lifts Work to You

You don't have to stoop and lift or raise or lower materials to the working level you find most convenient if you use the Working Height Lifter from Lewis-Shepard Products, Inc. It's a big help in industries where products are handled as individual pieces between processing operations or in handling small machine parts.

Pedals mounted on a steel plate control the motor that lifts and lowers the pan-type platform that holds the pieces. The plate can be placed wherever you want it. The platform lowers to the floor for loading by lift trucks. You can raise a loaded platform as high as 42 in. If you lock the platform in place, you can move the entire unit to a new location on a lift truck.

Working Height Lifter has a capacity of 4,000 lb. and an over-all height of 72 in., with platform lengths ranging from 36 in. to 54 in., widths of 32 in. or 38 in. It is powered by a 1/2-hp. motor operating on 115v.

• Source: Lewis-Shepard Products, Inc., 194 Walnut St., Watertown, Mass.

• Price: About \$935.

Inside Pipe Wrench

When you can't budge piping from the outside, try an inside wrench, Clark Bros. Mfg. Co. advises plumbers. The company has an internal pipe wrench that it says works in tight spots where a standard wrench is often useless.

Clark wrenches come in five sizes, ranging from 1/2-in. to 1-in. inside diameter. You operate them with a 1/2-in.-drive ratchet handle or an open-end wrench. As you twist the inserted



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The new "instant flow" hand control enables you to beat back fire with a long range "straight" stream...or to blanket the fire completely by the wider coverage of the improved "fan" pattern.

One man can wheel this extinguisher through a standard doorway...apply 150 pounds of fire-smothering dry chemical in less than one minute.

Write for full information on this new Kidde dry chemical extinguisher...or the full line of Kidde extinguishers and built-in systems.

Kidde

Walter Kidde & Company, Inc.

825 Main Street, Belleville 9, N. J.

Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.



Plastic tape seals in corrosive chlorine fumes

No more fitting and pounding lead sleeves over gas pipe joints at the Stauffer Chemical Company, Niagara Falls, N. Y. "Scotch" Electrical Tape No. 22 gives the same protection, takes only one-tenth as long to apply. Chlorine gas is safely sealed in the stoneware pipes, and the tape provides high resistance to static drain.

"Scotch" Electrical Tape No. 22 has high resistance to many corrosive elements. The plastic backing is unaffected by oil, water, acids, alkalies, sunlight and weathering. That's why it was specified by C. E. Kaddy, engineer with Singmaster and Breyer—contractors for Stauffer Chemical Company's two year expansion program.

Order this stretchy, impervious tape today from your wholesaler. It's available in 6 standard widths from ½ in. to 4 inches for quick application on small or large areas. Ask for "Scotch" Electrical Tape No. 22.



FREE FOLDER gives you complete information on the physical and chemical properties of this tough tape. Write: Minnesota Mining & Mfg. Co., Dept. BW-851, St. Paul 6, Minnesota, for immediate attention.



The term "Scotch" and the plaid design are registered trade-marks for the more than 100 pressure-sensitive adhesive tapes made in U.S.A. by MINNESOTA MINING & MFG. CO., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotch-lite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: Minn. Mining & Mfg. Co., International Division, 270 Park Avenue, New York 17, N. Y. In Canada: Minnesota Mining & Mfg. Co. of Canada, Ltd., London, Canada.

wrench in the pipe, it gets a solid inside grip. A detachable rubber collar on the wrench shaft keeps it from falling into vertical pipes.

The internal wrench makes it easier for a plumber to work against a bulk-head or a wall. It removes broken pipe from couplings, bushings, and faucets. The company claims it's safe to use on short, connecting tubes, since it doesn't damage the threaded ends. By placing the wrench in a vise, plumbers can also use it for on-the-spot threading jobs.

• Source: Clark Bros. Mfg. Co., Hillsboro, Ore.

• Price: \$17.50 a set.

Make Your Own Labels

You remember what children's "magic" slates are like: a cellophane sheet on a carbon paraffin base that you can write on with a stylus. Now you can get pressure-sensitive labeling tape that works almost the same way. Labelon Tape Co. packages it for home use as well as for industry.

Labelon tape has a special carbon-writing surface sandwiched between two layers of acetate. You can write on it with a pencil, stylus, or typewriter. It's said to be smudgeproof, dirtproof, and waterproof, can take temperatures up to 160 degrees.

You can get Labelon in widths ranging from 8 mm. to 1½ in., in a variety of colors. The standard 400-in. roll comes in a self-dispenser with a built-in cutting edge. The company says it's good for a wide variety of labeling jobs, including machine parts, records, instruments, lab equipment, and frozen foods.

• Source: Labelon Tape Co., 100 Anderson Ave., Rochester, N. Y.

• Price: \$1.25 to \$3.75 for standard 400-in. rolls; \$2.50 to \$7.00 for industrial 800-in. rolls.

NEW PRODUCTS BRIEFS

A portable riveter made by Manco Mfg. Co., Bradley, Ill., uses hydraulic pressure to squeeze—instead of hammer—a rivet into place. It comes with either an electric or compressed-air pump that produces the hydraulic pressure. Manco also supplies a stripped-down version of the riveter for those who want to design their own for special applications.

An electric water conditioner puts an electric charge on salt impurities in the water, prevents them from building up as scale in pipes and boilers. The conditioner is connected in series with a water line. It comes in six sizes from ½ in. to 4 in. The manufacturer: Aqua Electric Scale Control, Inc., 2028 E. 22 St., Cleveland, Ohio.

BUILT NOT ONCE BUT TWICE

Cummins®

CUSTOM BUILT

Diesels

Rugged, lightweight, high-speed Cummins Diesels perform better because they're custom-built to fit each job. And each engine is actually built twice. Assembled, run-in tested, disassembled, inspected . . . then reassembled and tested again. Precision building, Cummins exclusive fuel system . . . efficient service and parts organization, enable users to get peak performance, less "down-time" and more rugged, dependable power from Cummins Diesels. See your Cummins dealer.



Lightweight High-speed Diesel Engines (50-550 hp)
for: on-highway trucks
off-highway trucks • buses
tractors • earthmovers
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industrial locomotives
air compressors
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**Diesel power by
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TRADEMARK REG. U. S. PAT. OFF.

REGIONS



BUSINESS LEADERS figure largely in Charlotte's government, balance conservatism and aggressiveness in solving city's rapid growth problems.



ONE BIG SNARL is traffic. Charlotte has only



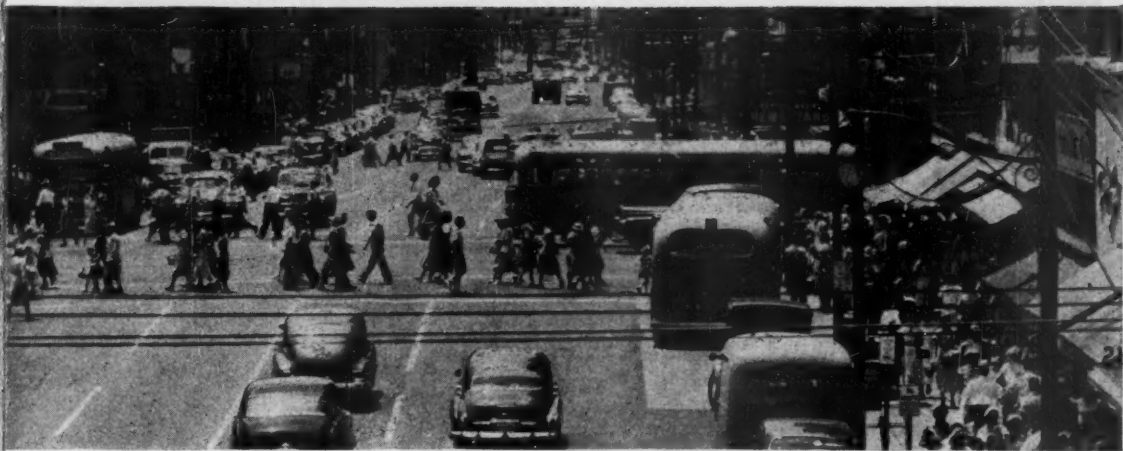
HOUSING has to be provided for Charlotte's influx. New projects such as this dot



WHITE-COLLAR WORKERS make up the bulk of the city's newer residents, dilute southern provincialism with cosmopolitan flavor. But any week . . .



FARMERS discuss weather, as wives do Saturday shopping in Charlotte.



two streets wide enough to handle the flow, with parking spaces always at a premium. Most business streets are only 22 ft. wide.



the outskirts of the city, take care of overflow. But the . . .



. . . FLAVOR OF THE OLD SOUTH is strong. The scent of mimosa can lead you to plenty of old southern mansions around Charlotte.

Charlotte: Unsouthern, Untypical

"The most unsouthern city in the South." That's the way one businessman described his native city—Charlotte, N. C.

He didn't mean that Charlotte has lost its North Carolina drawl, though now it's mixed with strains of Down East twang and Middle West flat. And he wasn't talking about the architecture; there are still the old southern mansions if you look for them.

He meant the attitude. Donald Follmer, head of the local factory of Kroehler Furniture Co., called it the city's "aggressiveness and progressiveness," one of Kroehler's major reasons for putting its southeastern plant in Charlotte.

While attitude is one of the big factors behind Charlotte's rapid growth in

the past few years, the growth, or type of growth, also is a major reason for the attitude.

• **Anything But Typical**—Charlotte did not scramble into long pants overnight. But it skipped through its adolescence pretty rapidly. In 1920 the city counted some 46,000 people. That made it 153rd in the country and second-largest in the state, bowing only to Winston-Salem. By 1940 Charlotte's population had zoomed to just over 100,000, topping Winston-Salem and placing 91st among the nation's cities. And by last year's census it had jumped to 69th place, with 135,000 inhabitants. This means that Charlotte almost tripled its size in 30 years.

Typically, a U. S. city that grows that

fast can give the credit primarily to industrial expansion. But typical is a word you can never apply to Charlotte. Manufacturing activity in Charlotte has stepped up, certainly, but it hasn't kept pace with the population growth. In 1919, for example, 5,161 Charlotte factory workers were employed in 111 plants. By 1947 those figures had just about doubled—233 factories, with 11,349 wage earners.

I. Credit Where Due

If manufacturing is not the force behind Charlotte's rapid growth, then what is? The answer is distribution.

During the past 20 or 30 years most of the country's major manufacturers



trusting an umbrella is like using a Record Safe for a Money Chest

Improper use of protective equipment causes many avoidable losses. The fire-resistive insulation of Record Safes stops fire, not burglars. The solid steel of Money Chests stops burglars, not fire. Combined fire and burglary protection, equal to ordinary and emergency hazards, is best secured by anchoring a Money Chest in a Record Safe. Your H-H-M Dealer knows how to use protection equipment properly. He can keep you from being one of the 43 out of 100 who lose records in fires and cannot resume business even though they carry fire insurance. He may reduce your safe burglary insurance premiums as much as 73%. Write today.

The last word in fire and burglary protection—H-H-M Underwriters' Laboratories' "A" Label Record Safe, with Money Chest inside.



Herring-Hall-Marvin Safe Co.
HAMILTON, OHIO

Craftsmen in . . . Safes • Insulated Record Files • Money Chests • Vault Doors • Rotary Record Files • Steel Storage Files • Bank Vault Equipment • Drive-In Windows • Depositories • Under-Counter Work • Stainless Steel Hospital & Building Products
Builders of The U. S. Silver Storage Vaults, West Point, N. Y.



have set up shop—either branch offices or warehouses—in Charlotte. Most of these are distribution headquarters for at least the two Carolinas; many of them for the entire Southeast. So, it's no accident that, although Charlotte ranks 69th in the country in population, it's the 29th city in wholesale sales.

• **A Different Story**—Any typical city that cuts its teeth on manufacturing expansion these days draws its added population largely from the surrounding area. Thus the city remains homogeneous as it grows. The newcomers fit easily into the existing pattern, and, because they're mostly wage workers, they're absorbed without having much effect on the city's way of life.

But a city like Charlotte, whose growth is due to distribution, tells a quite different story. The added population comes from all parts of the country; when a national manufacturer or distributor sets up a new local office, he usually imports trained men to take charge of it. Their customs and their wants are often entirely different from those of the city they adopt.

That by itself doesn't necessarily make the difference. The boom towns of the last war weren't changed basically by the heterogeneous influx of workers. But the people who have flooded into Charlotte in the past 20 years have been white-collar men.

And Charlotte's new citizens have

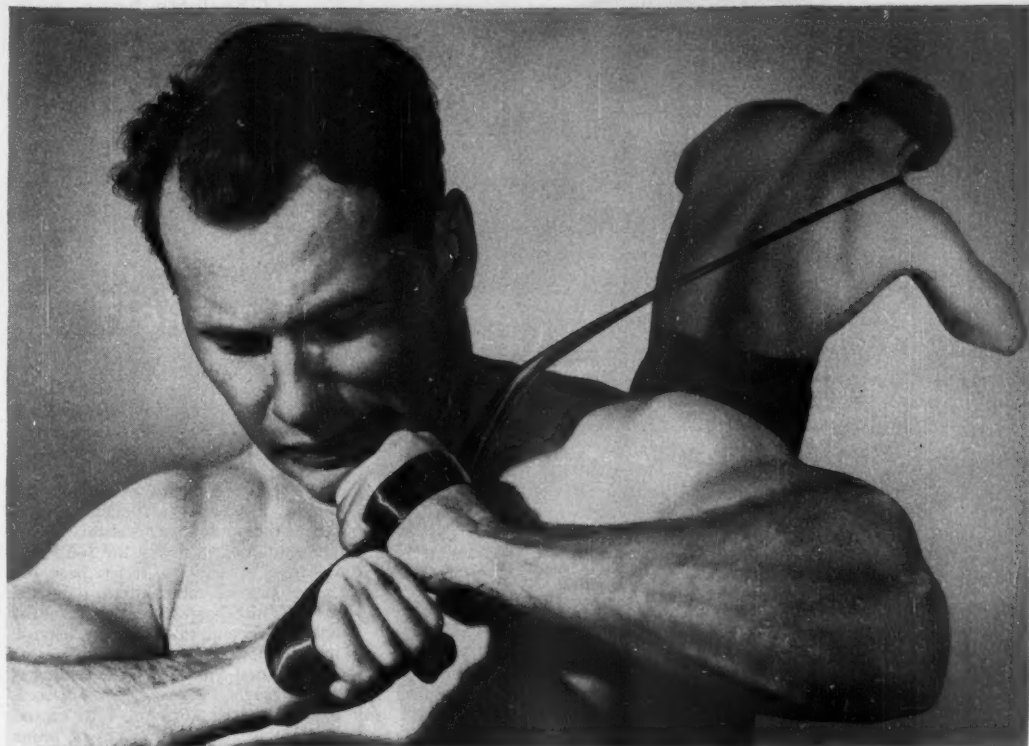
dipped deep into all the city's activities. They've been accepted socially by the people who run the city. As a result, their backgrounds and customs have made their mark on the city's life pattern.

• **A Neat Balance**—That's why in Charlotte today you don't find the provincialism of most other southern cities.

But most important, the city's business leadership has achieved an efficient balance between the inborn conservatism of the natives and the aggressiveness of the imported businessmen. That applies equally to Charlotte's business leadership and its government, because in Charlotte they are practically the same thing.

The men who really run Charlotte are nearly all businessmen (picture, page 70). Mayor Victor Shaw, for instance, is the retired president of a tire distributing concern; three of the seven city council members are active company presidents; another is the scion of an old Charlotte family who has wide business interests; one is an insurance broker, one a practicing attorney, and one is a linotype operator on the Charlotte News and a member of the International Typographical Union.

• **Not Invited**—Despite this labor representation on the council, unions have comparatively little influence in Charlotte. The old-line, conservative AFL



World's Strongest Tape?

Mighty men can't break it, repeated impact shock doesn't break an inch-wide strip of flexible "SCOTCH" Brand Filament Tape No. 880! No other reinforcing material of the same width and thickness can equal this new packaging tape for combined strength and resiliency. Tests prove it.

And these tests are *tough*. Hammer-like blows from swinging pendulums, coast-to-coast shipments of tape-strapped cartons—even gruelling tumbling tests, much more punishing than the roughest handling, prove this new tape far superior to other strapping materials for most heavy-duty packaging and materials handling.

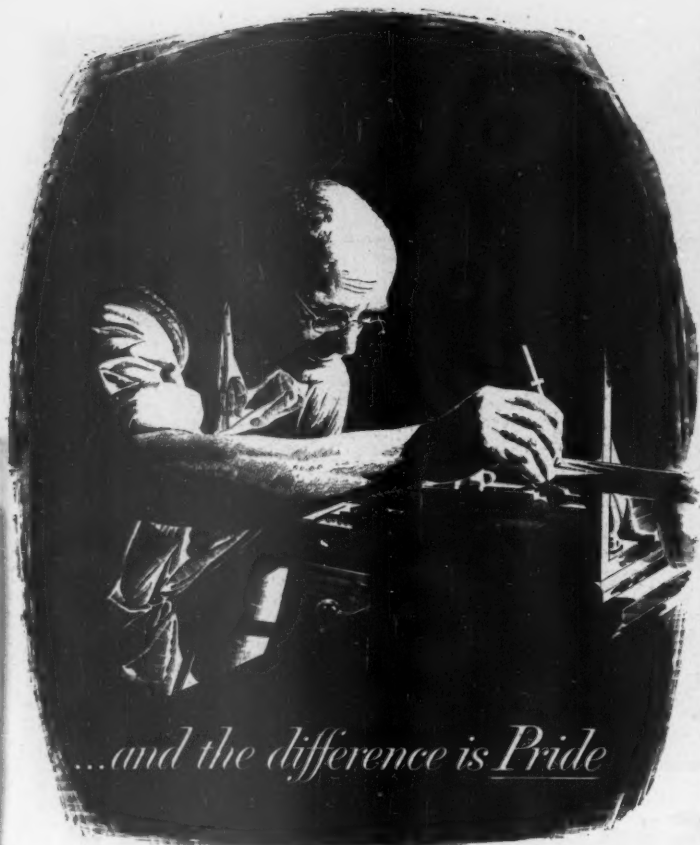
What's the reason? Over 5,000 continuous rayon filaments reinforce every inch of tape width just as cables support suspension bridges and as steel bars reinforce concrete. These filaments are embedded in an elastic, pressure-sensitive adhesive that *sticks* to the job, absorbs shocks and jolts again and again!

There has been a tremendous demand in all branches

of industry for this remarkable new packaging tape since we introduced it a few years ago. You will be wise to plan on safe, strong "SCOTCH" Brand Filament Tape for the future, to provide you with faster, more efficient and economical packaging. Address inquiries to: BWF8 Minnesota Mining & Mfg. Co., St. Paul 6, Minn.



The term "SCOTCH" and the plaid design are registered trade marks for the more than 100 pressure-sensitive adhesive tapes made in U. S. A. by MINNESOTA MINING & MFG. CO., St. Paul 6, Minn., also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: Minnesota Mining & Mfg. Co., International Division, 270 Park Avenue, New York 17, N. Y. In Canada: Minnesota Mining & Mfg. of Canada, Ltd., London, Canada.



He is a skilled machinist. A small man whose hands do the work of a giant. His skill is a fine thing . . . and his honest work a rare light in these days of "no more than I'm paid for." But he is a cut above most men, and the difference is pride — a deep pride in his craft . . . a pride in his contribution to some of our country's biggest companies . . . a pride in working for Taft-Peirce.

The Principal Product of Taft-Peirce Is Skill

Taft-Peirce is, basically, a contract manufacturer. We offer the skill of our craftsmen, the power of our machines, the experience of our engineers to others. We do the tough jobs . . . the special jobs . . . the emergency jobs . . . and the every-day jobs. We can design and build a single machine, or we can set up and operate a complete production line for a part or a product. And whatever we do we try to do well.

Naturally our 450,000 sq. ft. of manufacturing area and 1500 machine tools are pretty busy these days. But contract manufacturing is our regular line of business. It always has been. It will be tomorrow. Maybe we can be of service to you—especially if it is a long term project.



For Engineering, Tooling, Contract Manufacturing

TAKE IT TO TAFT-PEIRCE

"... Charlotte has a twin geographic advantage ..."

CHARLOTTE starts on p. 70

unions are very well established. But CIO unions are mostly quite small. "When a new civic project is started," says Franz Daniel, local CIO leader, "nobody ever thinks of asking labor to sit in."

II. Why Distribution?

Chiefly responsible for Charlotte's eminence as a distribution center perhaps is its geography. For one thing, it's practically in the center of the two Carolinas. Also, it's practically in the center of the Piedmont region of the Southeast.

The Piedmont (foot-of-the-mountains), a plateau 600 ft. to 1,200 ft. above sea level, extends from about the middle of Virginia south and west to about the middle of Alabama. It is by far the richest area of the Southeast, soilwise. In addition, it has been the major area of southeastern industrial growth, first because of the abundant water power and, more recently, because industry tends to follow industry.

• **A Natural Site**—Thus Charlotte has a twin geographic advantage. For companies that sell to industry, its central location in the Piedmont is of prime importance. And for consumer-goods distributors, the fact that it's in the middle of the Carolinas makes it a natural site.

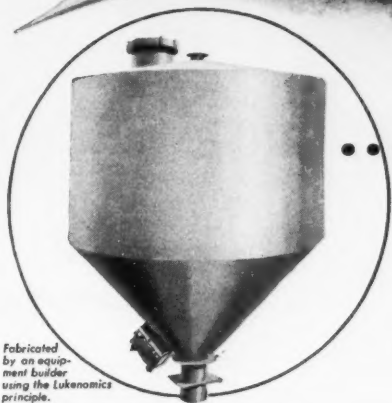
General Electric, for example, has made Charlotte the southeastern distribution headquarters for its construction materials division, covering both Carolinas, Georgia, Florida, Alabama, and eastern Tennessee. And just recently, GE moved the southeastern distribution of its Trumbull Electric division, which makes knife switches and circuit breakers, to Charlotte from Atlanta—Charlotte's one rival as a southeastern distribution center. For the appliance and lamp divisions, Charlotte is the merchandising center for the two Carolinas.

Why did GE pick Charlotte as a major distribution point? For the Carolinas alone, Charlotte's central location was the deciding point. And for the rest of the territory, GE found that anything south of Charlotte involved too much cross-hauling.

• **Other Reasons, Too**—There are many other reasons besides location, of course, for Charlotte's growth. One is climate—the annual temperature range is comparatively narrow, and the winter brings little snow or freezing weather. Another reason is the stable labor supply. Low wage rates used to be important, say 15 years ago, but the spread

Fighter Fuel ...

LOCKHEED F-90



Fabricated by an equipment builder using the Lukenomics principle.

This packaging tank, fabricated for a food processor, illustrates how alert equipment builders—applying the Lukenomics principle—can benefit process industries. Made of Lukens Nickel-Clad Steel, this unit assures efficient handling of a powdered milk product. Smooth inner nickel surface permits steady flow of powder to a conveyor packer. Result—sharp maintenance cuts, simplified cleaning, assurance of product purity. Plain steel would have been unsuitable, solid nickel too costly. Also, the use of clad steel resulted in an 85% saving of critical metal.

....or Dried Milk

... no place for production "lags" here! These vital products—like yours—call for peak processing efficiency, economy—achieved.

That's where progressive equipment builders can help. They can recondition present equipment for greater production. If you're buying new equipment, they can build it better, and make more effective use of scarce materials—often saving you money and conserving critical metals.

To assure the greatest user benefit, such equipment builders apply the *Lukenomics* principle. For Lukenomics combines their experience and that of designers and engineers with Lukens' specialized knowledge of materials and their application.

Write today, outlining your problem, for names of builders applying the Lukenomics principle. Manager, Marketing Service, Lukens Steel Company, 483 Lukens Building, Coatesville, Pa.

SPEED SALE OF YOUR SCRAP.

LUKENS

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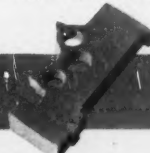
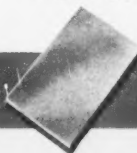
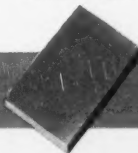
OVER 140 YEARS' EXPERIENCE AS THE WORLD'S LEADING PRODUCER OF SPECIALTY STEEL PRODUCTS

STEEL PLATE

CLAD STEELS

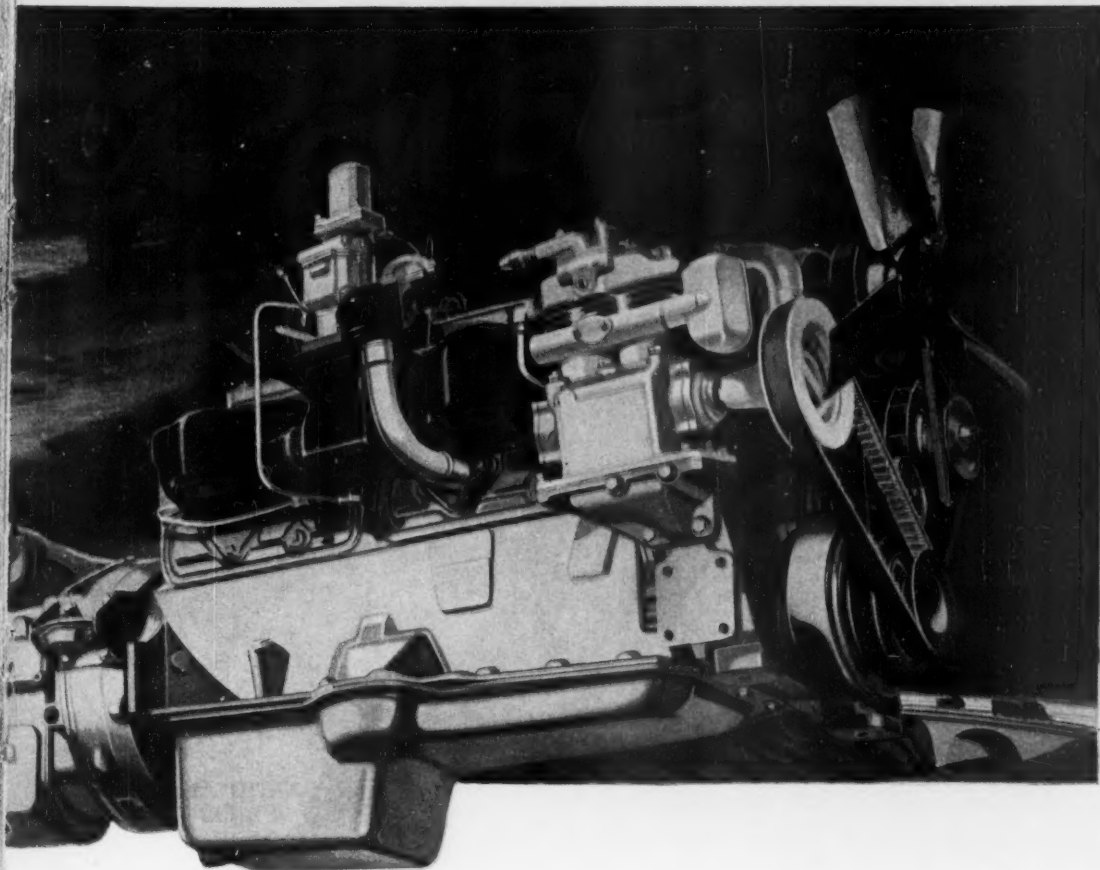
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STEEL PLATE SHAPES



MAGNIFICENT





More Power Per Pound of Engine Weight

AMERICA CAN'T DO BUSINESS WITHOUT TRUCKS

Trucks haul *three times* the freight tonnage of all other major carriers combined.

No community can exist today without trucks to supply its people everything they need to eat, wear and use, every day.

More than 25,000 U. S. communities have no other form of transportation.

90% of all farm products go to market by truck.

Millions depend on highway transportation for their livelihood—the industry provides one job in every 7.

NOW WHITE SUPER POWER ... the original "First Choice of the Pros" in the transport field...

has been raised to new heights of performance, dependability and economy. Substantial weight savings add extra money-earning payload under today's gross vehicle weight laws.

Mustang Power is available in White conventional models (red tractor, left) and in the 3000 Series, "The Truck that Tips its Cab to Service", (green tanker, above).

THE WHITE MOTOR COMPANY

Cleveland 1, Ohio

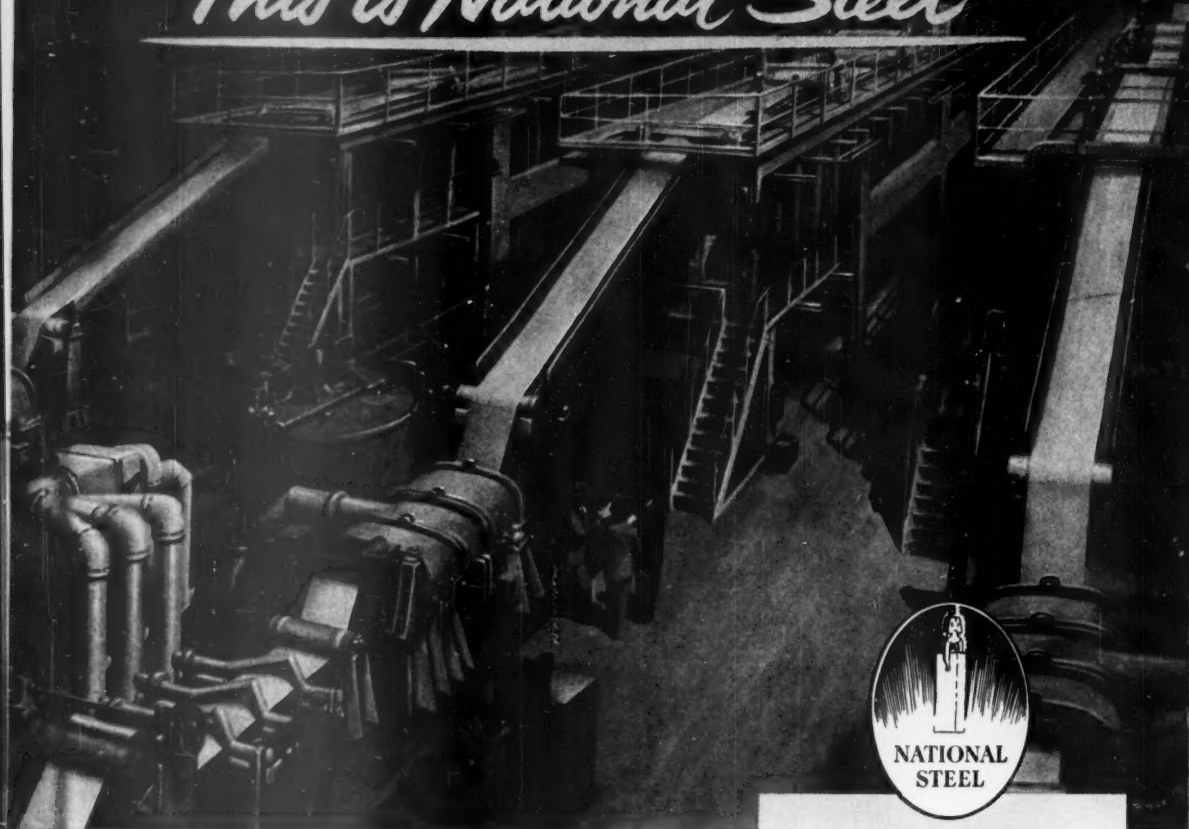
The White Motor Company of Canada Limited
Factory at Montreal

The new White Mustang Engine literally "breathes" through Super Power "lungs" the most efficient mixture of gas-and-air for tireless performance under all conditions of load and road. It "digests" fuel at a new economical rate. And it has a tremendous heart for the long-lasting stamina and trouble-free service so characteristic of White Trucks.



FOR MORE THAN 50 YEARS THE GREATEST NAME IN TRUCKS

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Men and mills of Weirton Steel Company are an important part of National Steel's productive might

Weirton Steel Company, one of the two major steel-producing divisions of National Steel, is the world's largest independent manufacturer of tin plate for the billions of tin cans America uses each year.

Its record of contributions to improved steel-making methods is a proud one. Weirton helped develop the electrolytic process of coating steel with protective metals . . . today operates the largest and fastest electrolytic lines in the industry. Weirton installed the world's first fully continuous 4-high hot strip mill . . . pioneered many other improvements now standard in modern steel-making practice.

Weirton is an integrated, versatile steel producer—from blast furnace and open hearth operations through complete rolling and finishing in its mills. Its products include a wide diversity of finished steels used by practically all of the nation's manufacturing industries.

Weirton Steel is one of the seven principal subsidiaries of National Steel, fastest growing among America's large producers of steel.

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WEIRTON STEEL COMPANY. Mills at Weirton, West Virginia, and Steubenville, Ohio. World's largest independent manufacturer of tin plate. Producer of a wide range of other important steel products.

GREAT LAKES STEEL CORPORATION, Detroit, Michigan. The only integrated steel mill in the Detroit area. Produces a wide range of carbon steel products . . . is a major supplier of all types of steel for the automotive industry.

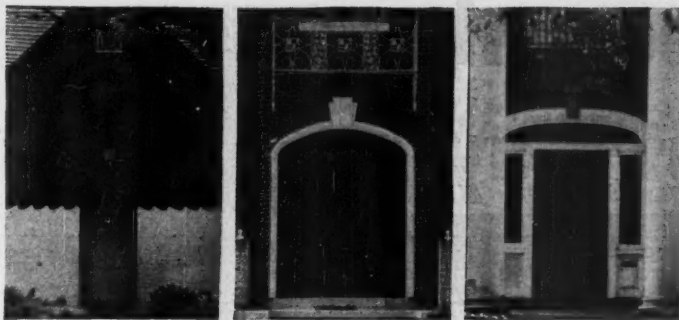
STRAN-STEEL DIVISION. Unit of Great Lakes Steel Corporation. Plants at Ecorse, Michigan, and Terre Haute, Indiana. Exclusive manufacturer of world-famed Quonset buildings and Stran-Steel nailable framing.

HANNA IRON ORE COMPANY, Cleveland, Ohio. Produces ore from extensive holdings in Great Lakes region. National Steel is also participating in the development of new Labrador-Quebec iron ore fields.

THE HANNA FURNACE CORPORATION. Blast furnace division located in Buffalo, New York.

NATIONAL MINES CORPORATION. Coal mines and properties in Pennsylvania, West Virginia and Kentucky. Supplies high grade metallurgical coal for National's tremendous needs.

NATIONAL STEEL PRODUCTS COMPANY, Houston, Texas. Recently erected warehouse, built by the Stran-Steel Division, covers 208,425 square feet. Provides facilities for distribution of steel products throughout Southwest.



INDIVIDUALISM runs to doorways on many of Charlotte's homes.

between the South and the rest of the country has narrowed.

Charlotte's transportation facilities are another important factor. The city is served by four railroads, four airlines, and five buslines.

Besides all this, ever since the big state road-building program of the 20's, Charlotte has grown in importance as a trucking center. Close to 100 truck lines now serve the city; some 60 of them maintain terminals there. And the city even has a factory that manufactures heavy-duty truck tractors—Brown Equipment Co., subsidiary of Associated Transport.

• **"Textile Capital"**—Another strong point is Charlotte's central position in relation to the textile industry. It calls itself "the textile capital of America," and with some reason. Of the 23-million spindles in the country, about 124-million are located in the two Carolinas, mostly in the Piedmont section of those states.

• **But Few Mills of Its Own**—For a city in the midst of the textile country, though, Charlotte itself has relatively few textile mills, probably because Charlotte labor is more skilled than the textile mills need and too high-paid for them to compete. Even so, textiles are still the largest industry in the city, employing nearly 40% of the workers. By comparison, textiles employ 94% of all workers in Gaston County, Charlotte's neighbor to the west, and only 77% in Cabarrus County, its neighbor to the northeast.

• **Diversified**—Charlotte's industry has two characteristics—it's widely diversified, and the plants are mostly small. Largest manufacturers in town are Lance, Inc., which bakes crackers, and Hudson Hosiery Co. These two companies are the only ones with more than 1,000 employees. Third-largest is National Carbon Co., which makes small storage batteries; fourth is Textron Southern, Inc.

The industry group with the largest number of manufacturing plants is food, with 50, according to the 1947 Census of Manufactures; the single in-

dustry with the most plants is commercial printing, with 18. Only 15 plants in the city have 250 employees or more.

III. "Paper Town"

Charlotte's rank as a distribution center makes it a relatively high-income city. Practically every refrigerator, TV set, farm tractor, or auto battery that's sold anywhere in North or South Carolina puts dollars into some pockets in Charlotte. One local businessman calls it a "paper town—because most of its business is done on paper."

• **Has Its Rich**—So, for a city of its size, Charlotte has far more well-to-do people than average. There aren't many millionaires, but there are a lot with \$50,000 or \$100,000 or \$250,000. That makes it a good investment town; it has 16 brokers' offices, seven of them members of the N. Y. Stock Exchange. It also has an active over-the-counter market in textile stocks, many of which are not listed on any exchange.

The high proportion of upper-income, white-collar residents has also made Charlotte an outstanding retail center. The price range in its stores is unusually wide for a city of its size; dresses, for instance, sell for anywhere from \$10 or less to several hundred dollars. For this reason, people up to 75 mi. away who want more expensive or more exclusive items than they can buy locally come to Charlotte to get them.

And Charlotte has many fine homes. The best address in Charlotte is Myers Park, southeast of the business center. But the city's entire outskirts are dotted with what, in other parts of the country, would be called good to fine residential areas.

• **A Few Things Lacking**—Culturally, Charlotte has not quite kept up with itself. It does have its own symphony orchestra and little theater and an adequate art museum. But there isn't a really decent auditorium in town. And that means that touring musical artists and road companies of Broadway shows

"Plover Bond is our letterhead paper..."



...direct comparison proved it visibly better!"

Simple, but convincing!

Why not try this? Have your printer submit letterhead proofs on your present paper and on PLOVER BOND. You'll see at a glance that PLOVER BOND is visibly better—bespeaks good taste—and will bring you a bonus of better impressions wherever your letterhead is seen.

Consistently first in finishes!

PLOVER BOND's clearly superior *Qualitex* finish is the result of *Perma-Therm* drying, a vital step in the *Permanizing Process*. This better paper-making method is used exclusively by *Whiting-Plover Paper Company*, Stevens Point, Wisconsin.

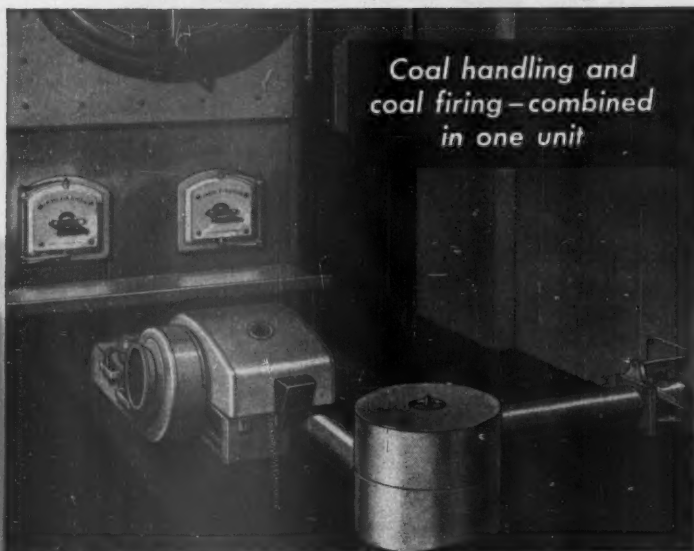
A good place to put your 2c in!

The average company can switch from ordinary paper to PLOVER BOND for only about 2c a day. When it costs so little to use this visibly better paper, why not ask your printer about *Permanized PLOVER BOND*?

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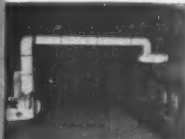


Make Steam the Low-cost Way



Coal-Flow Stoker

Transfer mechanism in coal conveyor tube permits bin-feed installations in boiler room layouts where this type of operation was formerly impossible.



Pneumatic Spreader Stoker
Drives, pre-heats, conveys, fires low cost coals. Highly responsive. Up to 1,000 boiler h.p. per nozzle.



Rotary Oil Burner
Fires low-cost No. 6 oils or lighter with complete steadiness at varying oil temperatures. To 500 boiler horsepower.



Commercial Gas Burner
Vertical type (above). Also Radiant Inshot and Ring types. Flexible operation, easily installed. To 400 boiler horsepower.

Can you afford to waste what Iron Fireman users are saving?



Iron Fireman stokers cut steam costs two ways:

1. Less coal. Clean, efficient fire gets more heat from coal. Automatic control of firing rate keeps fire adjusted to steam requirements at all times. No wasteful lag or over-run, even with extreme fluctuation of the boiler load.
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Let Iron Fireman engineers help decide which fuel is best for your plant.

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A MEDICAL CENTER for the Southeast, Charlotte has many doctors.

almost never stop in Charlotte. Charlotte's would-be theatergoers could travel to Raleigh, N. C., or Columbia, S. C., but they don't; they save their theaters for regular trips to New York.

The music lovers are better off than the theater fans—Davidson College, 19 mi. north at Davidson, N. C., and Winthrop College, 25 mi. south at Rock Hill, S. C., both have good auditoriums, and most of the touring artists give performances at one or both.

Another thing Charlotte lacks is eating places—the city has 276 restaurants, and not one really good one in the lot. But businessmen and others who belong can make up for this deficiency by lunching or dining at the City Club or one of the four country clubs.

And in Charlotte you curb that urge to paint the town. Charlotte is a city of churches. And strict Calvinism is the leading denomination. Perhaps as a result of this, the city has no night life at all. It was 100% dry until three years ago; even today you can't buy anything stronger than beer over the bar—hard liquor is sold only at state-owned package stores.

IV. Growing Pains

Rapid growth always brings problems, and here Charlotte has been no exception. Perhaps the most serious are schools and streets. Before the war, Charlotte's schools averaged less than 30 pupils per class; 30 was considered the maximum. But during the war, while the population continued to rise, no school building was permitted. So when the war ended, the schools were beginning to be overcrowded. And in the six years since, despite a generous building program, the overcrowding has got steadily worse. In the 1950-51 school

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YOU CAN BUY a dress for \$10 or \$100 in this Charlotte department store.

year there was space for 16,000 in the elementary schools—and there were 19,000 pupils.

• **Too Many Pupils**—Since the war Charlotte has built two new elementary schools and 23 school additions. Now under way are seven new elementary schools, two new high schools, and three more additions. Yet it's estimated that the crowding will get worse until about 1957. Engelhardt, Engelhardt & Leggett, educational consultants retained by the city to study the problem, has recommended that at least 13 more elementary schools and two more high schools be built by 1960.

• **Needs Wider Streets**—Charlotte's streets, too, are feeling the impact of the city's growth. The street system is based on a town map adopted in 1865, when the population was only 1,900. This map shows the two main streets with 100-ft. widths and three others with 50 ft. All other streets on the map—the area that is now the business center of Charlotte—have a maximum width of 22 ft.

Way back in 1917, in a survey made for the Chamber of Commerce, John Nolen, an independent city planner, said: "One of the greatest needs is a better system of direct thoroughfares of adequate width." He recommended widening of existing streets and provision for traffic and "parking spaces for automobiles."

• **Traffic Jam**—But nothing was done. As the city grew, many of the outlying districts were laid out by private developers, and the streets were put in with no regard for the existing pattern. Traffic got worse and worse. The downtown area was gradually being throttled to death.

Farmers and residents of nearby towns found it was just too much

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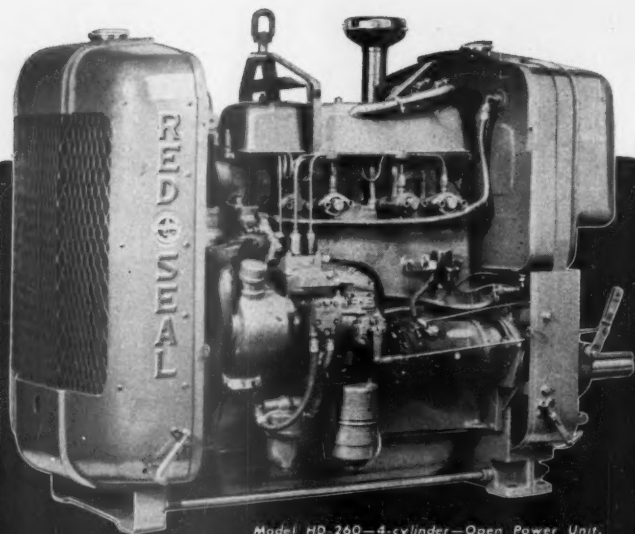
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Continental Motors Corporation

MUSKEGON, MICHIGAN

"...streets are still too narrow, and there still aren't enough places to park..."

CHARLOTTE starts on p. 70

trouble to shop in Charlotte and stayed at home to do their buying. A lot of Charlotte residents felt the same way; Charlotte is dotted today with local shopping centers.

So, in the spring of 1949, the city hired Herman J. Hoose, a traffic expert from Ft. Wayne, Ind. In the 24 years he has been in Charlotte, he has, in the words of one Charlottean, "brought order out of chaos." He has brought about installation of many more one-way streets, no-turn regulations at many busy corners, and many changes in parking regulations and the timing of traffic lights.

• **Traffic Authority**—Though traffic now moves relatively freely through Charlotte, the streets are still too narrow, and there still aren't enough places to park. The June, 1951, report of the City Planning Commission recommends (1) immediate widening of many streets and establishment of setback lines to permit widening of many others, and (2) immediate establishment of a Traffic Authority with power to condemn property for parking lots. The legislature has passed a bill permitting the city to set up such an authority, but the city so far has done nothing.

• **Water No Problem**—One thing the city has done something about is its water system, in good shape today thanks to foresight. The present system, which gets its water from the Catawba River, 12 mi. away, pipes it in, and purifies it, was built in 1913. It was expanded in 1926, in 1938, and again last year. Although it's adequate today, new expansions, particularly in the local distribution system, are needed if it's to remain adequate.

The sewage-treatment system is badly overtaxed. One of the two plants is now being expanded, and plans are being drawn for expansion of the other, when money is available.

• **If and When**—But that "when" looms awfully large, both for sewage-treatment and for other needed improvements. The city has almost reached the limit of its borrowing capacity—set by state law at 8% of assessed valuation. But that problem is heading toward a solution, too. The city's present assessments are both low and inequitable.

So the city and county together are now spending \$350,000 for a complete revaluation of all property in the county. When it's completed, the valuation—and the borrowing capacity—will be approximately doubled.



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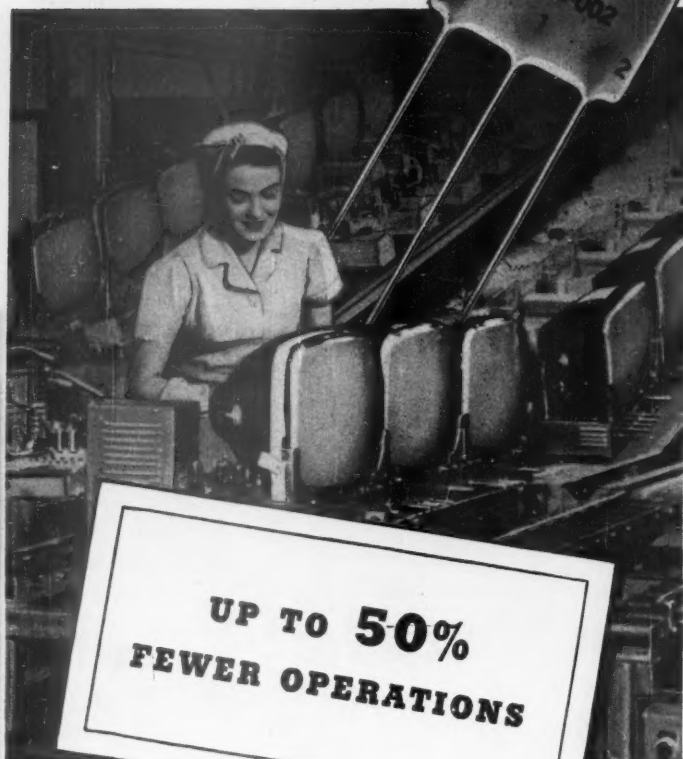
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Birmingham Wins

... a compromise with the Air Force over space in war-surplus airplane plant. Tenants may be ousted after Oct. 1.

The city of Birmingham, Ala., has won at least a temporary victory over bureaucracy as represented by the Air Force. The city is still leasing parts of the war-surplus Bechtel-McCone plane-modification center to its own tenants—although the Air Force retains the right to kick the tenants out on 30 days notice after Oct. 1.

• **Vulnerable to Recapture**—Shortly after the end of the last war, Birmingham bought the property for \$1, on condition that the government could "recapture" it in a national emergency. Then the city started leasing out parts of the plant.

Last October the city thought it had landed its biggest fish yet. Chase Aircraft Co., which had just won an Air Force competition and was in line for a contract, signed a 10-year lease for 650,000 sq. ft. Employment was estimated at 7,000 to 9,000. Chase engineers and personnel men came to Birmingham; the state employment office began interviewing job applicants.

Then the Air Force held up the contract. The engineers and personnel men left; job interviews stopped. But Birmingham was confident it would get the Chase plant eventually.

• **Out by July 1**—Finally the blow fell. The Air Force notified the city that it would recapture the plant and ordered all tenants out by July 1. It said it would lease 400,000 sq. ft. to Hayes Aircraft Co., which would hire about 1,000 workers to modify B-25's and that it would use the remainder of the 1.8-million sq. ft. "as needed."

Birmingham officials hit the ceiling. They didn't object to the recapture, they said; they agreed that the facility should be used for defense if it was needed. But they argued that it wasn't needed, that there was plenty of room for Hayes and all the existing tenants, too—plus Chase, if it ever got the contract.

• **Compromise**—After several trips to Washington, Mayor Cooper Green finally won a compromise. The Air Force insisted on the recapture July 1. But it agreed to extend all leases to Sept. 30 and to give 30 days' notice after that before booting anybody out.

• **Chase Gone**—Meanwhile, Birmingham's hope of getting Chase has gone glimmering. Henry Kaiser has bought a controlling interest in the company (BW—May 26 '51, p. 21); the planes will be built at Willow Run.



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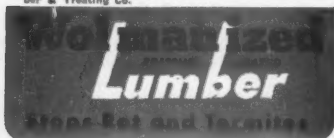
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IRVING P. KRICK (left), boss cloud-seeder, and aides beam at a winning campaign.

Rainmaking: Dust Bowl O.K.'s It

After a year of test, cloudseeding is pretty generally acclaimed in arid area. Contracts are being renewed by ranchers and farmers. But dissenters say there's too much snow and hail.

The Dust Bowl—where water is more precious than gold—has completed its first year of massive-scale, professional rainmaking. The completed returns are piling up: The picture is taking shape of what man can do when he wraps himself in the mantle of Nature.

The returns are not wholly conclusive. Not every problem was solved. Conditions, good for some areas, flashed back to infuriate others.

• **More Jobs**—But the final voice of the Dust Bowl as a whole is a rousing cheer for the manmade rain. And the rainmaker-in-chief, Irving P. Krick (BW—Aug. 5 '50, p. 28), is very much in business. His Water Resources Development Corp. already has 40 contracts to seed the clouds over 330-million acres—an area 10 times the size of New York State.

Of course, no one can prove whether Krick or capricious Nature produced the rain that fell so bounteously on range and farmland. But the men who hired Krick are generally satisfied. Mostly, when he seeded, rain fell.

Dissenting voices come from minorities with local grievances. Men in the high hills scream at the heavy snow pack that followed Krick seeding. But the same snow pack can spell bonanza

for irrigated farms in the plains below.

• **Hail Trouble**—Biggest squawk of all came from farmers whose crops had been flattened by hail. Hail is the mootest of points in the rainmaking business. Krick denies that his seeding causes it; he argues that his operations should tend to reduce the amount of fall.

A lot of farmers can't see it that way. For them, it's simple: Krick seeds, then it hails. Ergo: Krick caused the hail.

• **Drought**—Rainmaking in the Dust Bowl got started in the spring and early summer of 1950. It got so dry that the ranges were searing, cattle were being shipped out of northeastern New Mexico and southeastern Colorado. Ranchers had visions of a renewal of the deadly days of the 1930's when drought just about wrecked the whole 60,000-sq. mi. area that takes in hunks of Colorado, New Mexico, Kansas, most of Oklahoma, and the Texas Panhandle.

Scared stiff, the ranchers were ready to try anything. Albert Mitchell, leading New Mexico stockman, flew to Krick's headquarters in Denver and signed a contract for cloud seeding.

Krick got going. And so, almost immediately, did the rain. It fell so hard

and so fast that by early September the cattlemen asked Krick to turn the stuff off, so they could get the hay in.

In Colorado both cattlemen and dry-land farmers had joined Mitchell's bandwagon. They signed up in droves, and they got their rain. One satisfied customer, a cattleman, guessed that the post-Krick rains had added \$15-million to crop and livestock values in his county alone.

• **Above Normal**—The records show that, despite their parched 1950 start, both the New Mexico and Colorado areas ended up the year with normal or better rainfall. And that despite a resumption of the drought in the fall. Incidentally, the seeded area was the only part of New Mexico that ended up the year without a rain deficit.

Coloradans and New Mexicans rushed to sign up again. For Colorado, Krick was to seed the mountains at the headwaters of the Arkansas River, in order to increase the snowpack that feeds the irrigation ditches.

Krick did the job all right. Rainfall was 50% above normal—so was the temperature of the mountaineers. High country people yowled that they had snow running out their ears, demanded that the state halt the seeding. Climax Molybdenum Co. claimed that it had to spend \$31,000 more than usual to shovel snow out of its mine, mill, and village.

But the Arkansas is flowing strong and steady; the irrigation farmers are purring at their work.

• **Failure**—Krick took on a different job last winter, for the plainsmen, to seed the winter storms. For a good while, nothing came of it. Krick even admitted it was a mistake. He rationalized that the area is normally dry in winter, that nobody can make rain unless there is moisture in the air to begin with.

Krick's customers—the Weather Research Assn.—got madder and madder. While they were still protesting, spring came, and with it rain, for the area.

The hail problem is very much alive; farmers have to pay as high as 18% premiums for insurance. Despite Krick's belief that his silver iodide should ease the fall, there were severe storms in the seeded areas. In the Arkansas valley, battered farmers demanded that he lay off. Krick did, closing his generators on June 24. Three days later came a super hailstorm. Krick says that's proof he didn't cause the trouble.

• **Reversal**—In northeastern Colorado, farmers have called on Krick to pull a switch—to seed the clouds so lushly that it will cancel out the threat of hail. If that fails to "freeze out" the hail, Krick has another plan ready. A plane is standing by. If it spots any storms building up, the plane will strafe them with thermite cartridges fired from a signal pistol.

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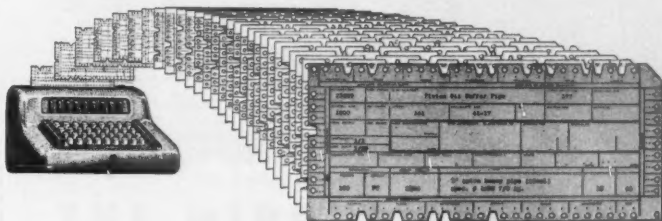
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Hawaiian Airlines, Ltd., carried 332,000 passengers last year, but it didn't carry them far. Its flights range from 24 mi. to 219 mi.; the average fare is under \$10.

That means that checking weights of baggage and passengers is a major nuisance. The short, frequent flights mean lots of checking. The low fares mean the line can't afford a big payroll of clerks jotting down figures and toting them up.

• **Modifications**—Hawaii has the problem licked, though. Cash registers are the answers—with the cash drawers omitted and a few minor modifications worked out by National Cash Registers. Here's how it works:

All a passenger arriving at the main terminal at Honolulu has to do is turn in his ticket at one window, where he announces his weight. Then he goes to the baggage window and turns in his gear. That's the end of it, for him.

In each booth where he reported was one of the educated cash registers. The clerk rang up the passenger's serial number for his flight (whether he is the first, second, or fifteenth passenger to arrive) and his weight. As each passenger is rung up, the machine runs a cumulative total of weights. When the serial number equals the number of reservations, the clerk knows his flock is all on hand.

• **Cumulative**—Pretty much the same thing happened at the baggage window:

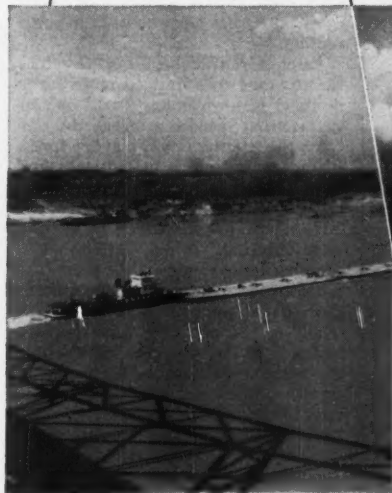
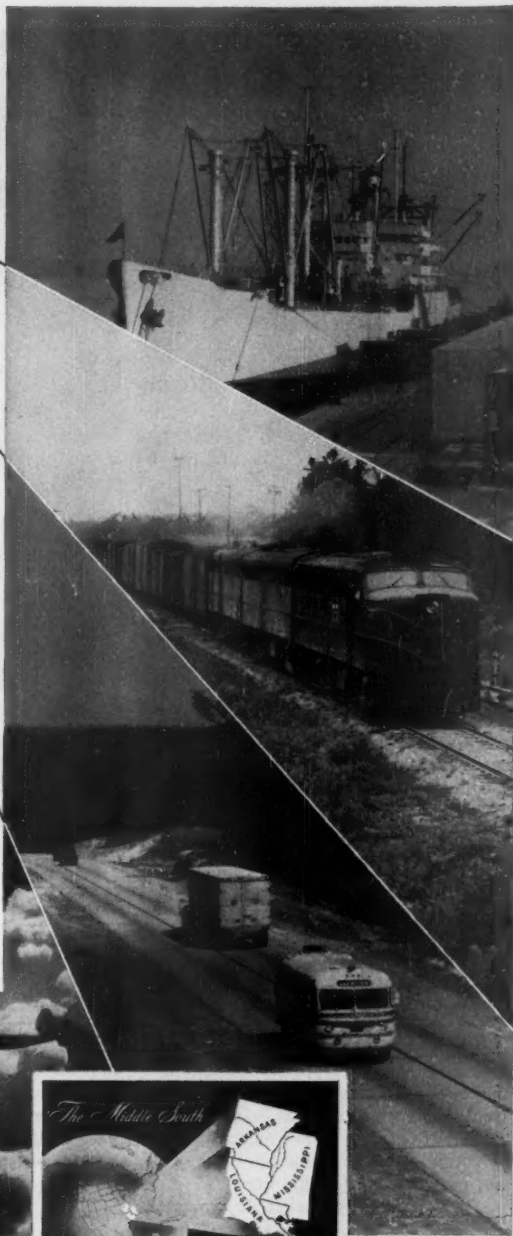
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Electronics Speed News For Detroit Paper

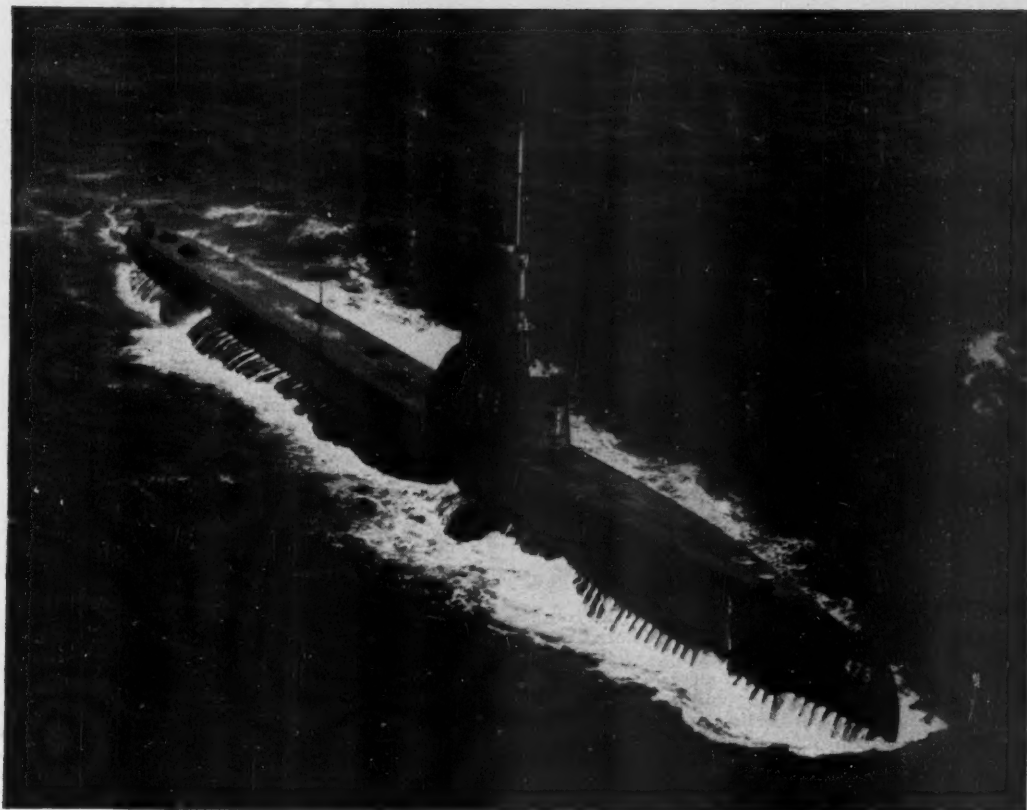
Electronics have caught up with the men with the press cards; they now talk their earthshaking events into a lifeless—and sober—recorder.

At least, that's how things are on the Detroit Times. Managing editor W. S. Lampe, with an assist from Bell Telephone, worked out the new system, to save time and money. He did it with a machine called Singit.

• **Call and Talk**—A reporter, boiling over with news, just calls a special number at the Times and starts reeling off his story or his notes. He talks as fast as he wants; the Singit machine at the other end records every word. Back in the office, the city editor can switch on a loud speaker and find out what the reporter has to offer, without interrupting.

Later, a rewrite man can play back the recorded rolls, instead of trying to decipher his own notes. That's one advantage, but speed is a bigger one. Because the reporter can talk at top speed, his news gets to the desk faster. And the phone call is a lot shorter, which saves considerably on tolls—as much as 73%, the Times found in a week of close checking.

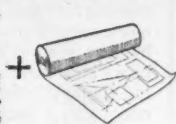
• **Other Jobs**—Singit may be more than a high-speed reporter; it offers an interesting possibility for business. One wholesale grocery in Detroit is thinking of installing the system for its salesmen. At present, salesmen on the road write up their orders at night, turn them in next day. With Singit, they could phone them in immediately. Service might be speeded up by as much as a full day.



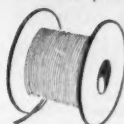
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Capital Airlines agents just punch a button: Out whirs your pasteboard, and in goes a book-keeping entry of the sale.

With the use of a new ticket dispensing machine, Capital Airlines has made it just about as quick and easy to buy a ticket from Washington to Chicago or Detroit, say, as it is to get into your local movie theater. The machine also practically eliminates bookkeeping drudgery for ticket agents.

• **Punch and Whir**—Installed experimentally this week at Capital's office at Washington National Airport, the unit actually looks and works much like a ticket dispenser in a movie booth. When you ask for your ticket, the agent just punches a button or two, there's a whirring noise, and out from a slot pops your ticket—all punched, stamped, and price-marked. The agent just marks the flight number and departure time on it, for your convenience. In the meantime, the machine has automatically tallied the sale for accounting purposes.

Capital says that this machine saves about 25 seconds per sale over the conventional manual method of ticket selling. In this period of peak loads, Capital is selling about 1,000 tickets a day out of its Washington office alone. Adding up, Capital figures that the machine saves about seven hours of ticket time a day.

• **Treasurer's Idea**—The idea for the ticket vending machine came from Robert P. Wright, Capital's assistant treasurer. When buying a ticket for a movie one night, Wright was struck by how quickly and easily the ticket came and what a boon it would be to Capital ticket agents—and their customers—if they could use the same kind of machine. Wright talked to officials of General Register Co., manufacturer of ticket vending machines, and got them to tailor a machine specifically for airline use.

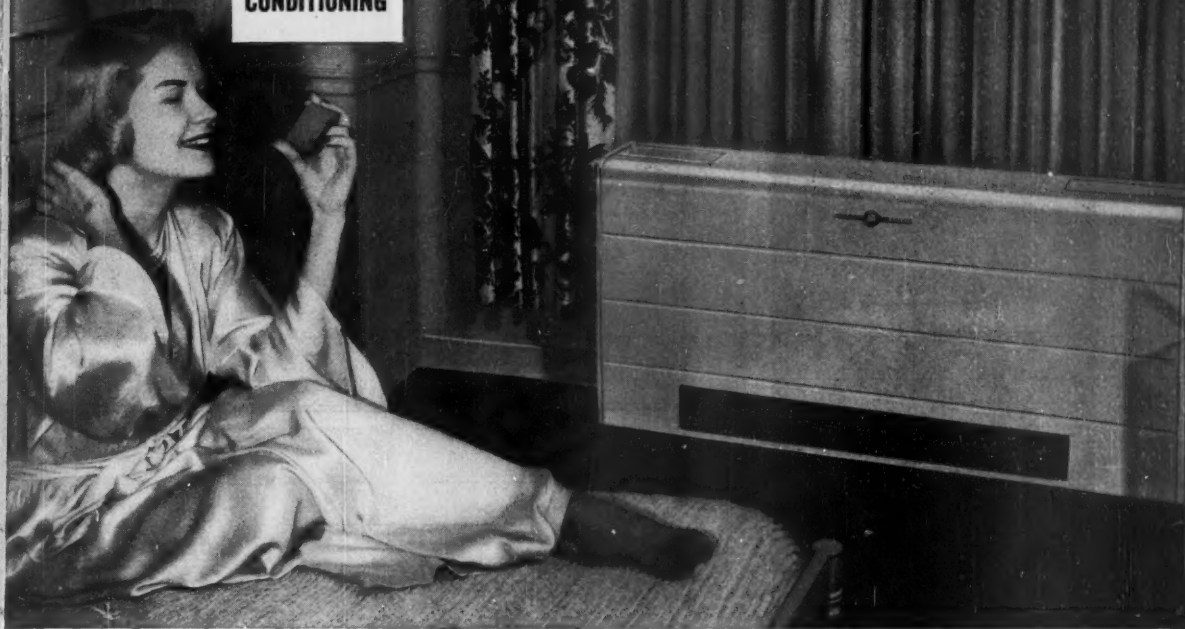
The unit General Register devised whirs out a 2-in. x 4-in. pasteboard at the punch of a button. If you want a round trip, the agent punches two buttons.

• **Wider Use Foreseen**—In its shake-down run at Washington, the machine issues tickets for only five destinations: Norfolk, Pittsburgh, Cleveland, Detroit, and Chicago. But these five cities account for almost 80% of Capital's out-bound ticketing from Washington.

If the speedy ticket seller proves successful in Washington, Capital says it will adapt it for use in other principal cities served by the airline.



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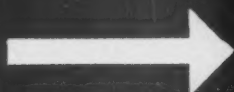
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musicals have
netted millions



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Weeks **OUT OF TOWN**
Estimated **GROSS**
Estimated **NET PROFIT**



292½

394 U.S.: 284 Abroad

\$34,500,000

\$ 4,245,500



117½

89½ U.S.: 59 Abroad

\$9,350,000

\$1,250,000



THE FAILURE Allegro is only Rodgers and Hammerstein collaboration not to make money. It lost \$50,000, despite long run.

R & H Shows

Rodgers and Hammerstein are the biggest hits in musical history. Even though their work and names may prove less immortal than Beethoven, Brahms, and Wagner, or Gilbert and Sullivan, they are now unquestionably the most fabulous money-makers since man began mating words and music.

In the matter of contemporary success, Richard Rodgers and Oscar Hammerstein II are at the peak of their profession. They are in the very highest bracket of ASCAP, the American Society of Composers, Authors & Publishers, which collects and distributes royalties for public performances of music. Their income as a team is believed to be somewhere over \$1.5-million a year, or roughly \$31,000 a week, before taxes.

On the basis of known data and careful guesses by professional associates, the weekly net of the partnership probably breaks down more or less this way:

\$9,000—Royalties from South Pacific (two companies).

\$4,600—Royalties from The King and I.

\$2,000—Royalties from Carousel and



| |
|-------------|
| 115 |
| 70 |
| \$9,694,900 |
| \$1,995,000 |



| |
|---------------|
| 17½ |
| 4 |
| \$1,064,600 |
| In the making |

Are Pushing \$8-Million

Oklahoma!, both now playing in Britain.

\$1,500—Royalties from ASCAP.

\$500—Royalties from grand rights (performance of stage productions). These come exclusively from shows written before the two collaborated. None of their joint efforts (Oklahoma!, Carousel, Allegro, South Pacific, The King and I) has been released for stock or other production.

\$1,200—Profits from Williamson Co., Rodgers and Hammerstein's own music publishing company.

\$500—Royalties from sheet music sales of old catalog songs (pre-collaboration).

\$10,000—Profits as producers of South Pacific.

\$1,700—Royalties from U.S. road production of Oklahoma!, revenue from record sales, royalties from sheet music sales of songs written together.

With an income such as this—and the tax bill that goes with it—it is understandable that the main concern of the two is to spread out their earnings, particularly to provide for their estates. This explains their determined policy not to sell or lease any of their

joint creations to films, television, or radio. Sale or lease would add little to actual net profit. But it would destroy—at least temporarily—the value of the shows as properties. By withholding their works, the two hope to be able to support their heirs on the income from stock rights, etc., as long as copyrights remain in force.

I. Words and Music

As composer-lyricist collaborators, Rodgers and Hammerstein have compiled an overpowering record since their start in 1943 with Oklahoma! That creation, besides revolutionizing the techniques and standards of the musical theater, saved the Theatre Guild from bankruptcy, earned a profit of \$4,245,500 on an original investment of \$90,000 and set numerous box-office and performance records.

Its original Broadway engagement of 2,248 performances is the longest run for a musical in theater annals, being topped only by Life With Father (3,224), Tobacco Road (3,182), and Abie's Irish Rose (2,327). Its 1,544-performance engagement in London



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"... Oklahoma! has had a fabulous history ..."

RODGERS & HAMMERSTEIN starts on p. 96

is the second-longest on record, exceeded only by Chu-Chin-Chow. (Hammerstein, incidentally, is the most successful author in the 288-year history of London's Drury Lane. The four longest-run shows in the theater's annals have all been his—Oklahoma!, Rose Marie, Carousel, and Desert Song. For almost four years—1926 until the end of 1929—the theater played nothing but Hammerstein hits.)

- **Over 5,000**—Altogether, Oklahoma! has played 5,524 performances in America, including its original run, a recent return engagement of 72 performances, plus 3,184 on tour and 20 during its original tryout in New Haven and Boston. When it finishes its present run on the New York "subway circuit," the show will go to Berlin under State Dept. auspices as an example of typical American culture. After that it will go on nationwide tour again.

The British production of Oklahoma! closed in London last fall; since then the show has been touring the provinces with the customary success. Productions have also toured Australia and South Africa, and it was produced in Norway and Sweden, besides being seen in a simplified version in the Pacific during World War II.

- **Beginnings**—The show, originally written by Lynn Riggs, has had a fabulous history. First produced by the Theatre Guild as Green Grow the Lilacs, the play was sold to Metro-Goldwyn-Mayer, which did nothing with it. The rights to the play were subsequently repurchased by the Guild.

Meanwhile, Hammerstein tried unsuccessfully to persuade Jerome Kern to collaborate with him on a musical treatment. At the same time, without either group being aware of the other, the Guild's Theresa Helburn approached Rodgers about a musical version.

Rodgers was interested and, although he had never teamed with any lyricist except the late Lorenz Hart, suggested Hammerstein as a possible coworker. The two men met at lunch, and their collaboration began.

- **Good or Bad?**—The finished product was unlike anything ever attempted for the musical stage; no one knew for sure whether it was good or bad. Because it was too unorthodox to catch the immediate enthusiasm of backers, the Theatre Guild had an agonizing time raising the necessary financing. Moreover, everyone knew the Guild was on its financial uppers, while Hammerstein, who turned out a succession of hits for years, had had nothing but flops for nearly a decade.

At the initial tryout in New Haven the general reaction was disappointing. Also, expenses were much higher than expected. Finally, by offering unusually advantageous terms, sufficient funds were raised to get the production to Boston and ultimately to Broadway.

During the Boston engagement the title was changed from Away We Go to Oklahoma!, and, for the first time, there began to be favorable comment from critics and audiences. Still, nobody dared be optimistic about the show's chances in New York. But from the opening number, Oh, What a Beautiful Morning, it really bowled over the audience.

- **Change of Pace**—Following Oklahoma!, Rodgers and Hammerstein tried a change of pace in 1945 with an adaptation of Ferenc Molnar's Liliom. They transferred the Budapest locale to a New England coast town and retitled the play Carousel. It was also produced by the Guild and, to no one's surprise, became a hit only less imposing than Oklahoma! After a run of 890 performances on Broadway the show went on tour for 86 weeks, following which it returned to New York for 49 performances. The production returned a profit of around \$275,000 on an investment of \$150,000.

A British production of Carousel opened last June at the Drury Lane in London and is still playing there. It will move to another theater when South Pacific takes over the Drury next Nov. 1.

The next R & H collaboration was Allegro, their only effort not adapted from a play or book, and their only creative failure. The play, again, was a major departure in technique and mood. Produced by the Guild in 1947, it ended with a loss of about \$50,000, despite long runs on Broadway and on the road.

II. Inspiration and Balance Sheets

On their two other shows, South Pacific and The King and I, Rodgers and Hammerstein have acted both as creators and producers. Since forming their production partnership in 1944, the two have become the most successful firm on theater row.

Broadway shows today are virtually all financed as limited partnerships. The angels, or backers, supply all the underwriting in return for half of the profits. The producer receives the other half. However, only the backers are liable for losses.

Of the eight shows that R & H have produced, only two have failed:

- **I Remember Mama**, dramatized by John van Druten from Kathryn Forbes' book, Mama's Bank Account, was produced in the 1944-45 season. It cost \$75,000 and made a profit of about \$500,000 from Broadway and the road.

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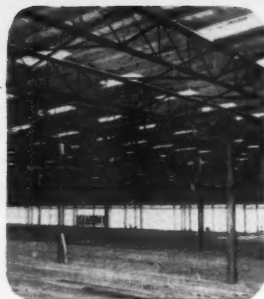
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Interior view of warehouse, showing skylight, roof, and column construction



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"... Of the eight shows produced, only two have failed ..."

RODGERS & HAMMERSTEIN starts on p.96

(714 performances on Broadway alone).

John Loves Mary, a farce by Norman Krasna, was produced in 1946-47, cost \$45,000 and made a profit of about \$225,000 on Broadway and tour (423 performances on Broadway).

Happy Birthday, by Anita Loos, was produced in 1946-47, with Helen Hayes as star. It cost about \$110,000 and made a profit of \$75,000 on Broadway. It did not tour (564 performances on Broadway).

South Pacific, with a book adapted by Hammerstein and Joshua Logan from James Michener's *Tales of the South Pacific*, and with music by Rodgers, was produced in the spring of 1949. R & H partnered with Logan and Leland Hayward on the production (BW-Jun.18'49,p96). Starring Mary Martin and Ezio Pinza, it was financed at \$225,000, cost \$185,000, and, so far, has distributed \$1,995,000 in profits (\$100,000 more will be distributed some time in August). It has about \$360,000 in additional assets, including undistributed profits and cash reserve. The show is currently netting a total of about \$20,000 a week from the original production on Broadway (956 performances) and the second company, now in its ninth month at the Shubert Theatre, Chicago.

The Happy Time, dramatized by Samuel Taylor from Robert Fontaine's book of the same name, was produced in the 1949-50 season. It was financed at \$100,000, cost \$46,500, and, thus far, has distributed \$256,000 in profits. It has additional assets of about \$40,000 in distributed profits and cash reserve. The play recently closed on Broadway (614 performances) and will go on tour in the fall.

The King and I, with book by Hammerstein, music by Rodgers, based on Margaret Landon's book, *Anna and the King of Siam*, was produced in the spring of 1951. It was financed at \$360,000 (\$300,000, plus 20% overcall) and cost \$361,000, including production, tryout loss, and pre-opening expense in New York. With Gertrude Lawrence as star, it has played to capacity every week, grossing about \$51,700, at an average operating profit of \$10,400. As of July 28, it had earned back \$181,000, leaving \$180,000 still to go to get into the black (155 performances).

• **Flops**—R & H have produced two flops. One was *The Heart of the Matter*, dramatized by Graham Greene and Basil Dean from the former's novel of

the same name. This closed during a Boston tryout in the spring of 1950, at a loss of \$136,100. The other was *Burning Bright*, by John Steinbeck, which lost \$65,000 in a short run on Broadway during the fall of 1950.

III. The Perfect Professionals

Among their associates, Rodgers and Hammerstein are considered the perfect professional team. As far as anyone knows, there has never been any dispute, disagreement, or jealousy between them.

Both of them are native New Yorkers, Hammerstein the heir of a celebrated theatrical family, Rodgers the son of a doctor. Both went to Columbia University, and both wrote for (Hammerstein also appeared in) Columbia Varsity shows. Although the two knew of each other from college, they were never close until long after they were established on Broadway.

Through the years, Hammerstein has worked with a number of different composers, notably Jerome Kern, Sigmund Romberg, Herbert Stothart, Vincent Youmans, Rudolf Friml, and George Gershwin. Rodgers had only one collaborator, Lorenz Hart, with whom he started on Columbia shows.

• **How They Work**—Probably the clearest idea of the R & H approach to their craft, and how they work together, has been written by them. In the prefatory notes to *Lyrics* (Simon & Schuster), a collection of his words to songs, Hammerstein says, "In our collaboration, Mr. Rodgers and I have no definite policy except one of complete flexibility. We write songs in whatever way seems best for the subject with which we are dealing. Most often I write the words first, and yet in nearly all our scores there are at least one or two songs in which he wrote the music first."

"Dick and I stay very close together while drawing up the blueprint of a play. Before we start to put words or notes on paper we have agreed on a very definite outline, and we have decided how much of the story shall be told in dialogue and how much in song."

"After we have passed the blueprint stage, we then work together on interior problems. . . . It is not at all unlikely that Dick will give me valuable lyric ideas and I, on the other hand, frequently contribute important suggestions for the music."

• **Partnership**—Of the two, Rodgers is the businessman of the team. Quick-spoken, alert, something of a worrier, he spends at least part of every day at their offices on Madison Ave. Hammerstein, a dark, unruly-haired hulk of a man, rarely bothers with the business side of the partnership. From the look of the profits statement, he needn't.



THE PLUG THAT COST AN EXTRA MISSION

It was an ideal day for a photo reconnaissance mission—bright and clear with perfect visibility "over target." Every shot should have been perfect.

Instead, the film turned out completely blank—the "recon" mission had to be re-run and the scheduled bomber raid put off an extra day.

Investigation disclosed that jars from rough air had disconnected the

plug supplying power to the camera. To eliminate this difficulty, Air Force officials consulted the Graybar Electric Company. Shortly afterward a special locking plug—manufactured by one of Graybar's oldest suppliers—was made standard equipment on all photo-reconnaissance aircraft.

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How Labrador Ore Is Shaping Up

Good news trickled out of the wilderness this week. The transportation-construction job that will bring out the iron ore from the Labrador-Quebec deposits is coming along according to schedule.

For years, dwindling supplies of the ore in the famed Mesabi range have worried the steel industry. Unless new sources were found, full-scale steel operations in the U.S. would be imperiled. That's why there has been such wide interest in the exploration and development of the deposits in the

Canadian wastelands (BW—Sep. 11 '48, p40). A large section of the industry is pinning its hopes on this venture.

Actual construction—as differing from exploration work—started last September, at Seven Islands on the St. Lawrence River (BW—Sep. 23 '50, p92). Present schedule calls for delivery of ore at Seven Islands (via rail) in 1954.

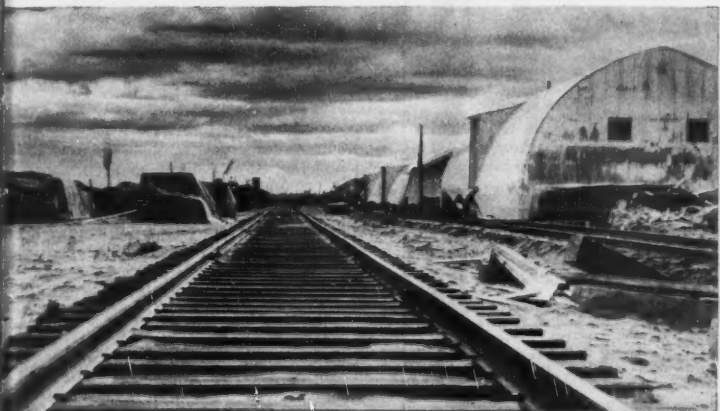
• **Railroad Mileposts**—About a year ago, contracts for the 365-mile railroad that will extend north from Seven Islands to the ore deposits were awarded. By the end of this year, about 12 miles



2 Mobile crane unloads rails at Pointe aux Basque. It will take 116,000 rails to build the road from its Seven Islands terminal to Knob Lake, 365 miles north.



3 Rock fill from a blasted section is dumped by diesel truck. In some places it will take many tons of fill to build up the roadbed to grade requirements.



4 Warehouses and stacks of materials line the track in the terminal area. When the road is completed, 100-car trains will carry the ore down from the fields.

MATERIAL HANDLING *News*

Read 'em and REAP



SAFETY SAVES!

Cartoons and a light touch sell the idea that safe operation and good care of materials-handling equipment pay off for company and operator. Pocket size. Available in quantity.



BASIC FACTS

For a clear understanding of modern handling principles and practices, have your entire staff read this one. Pocket size.



CONDENSED CATALOG

A complete, compact showing and basic specifications of the Clark Leadership Line—fork-lift trucks, industrial towing tractors, powered hand trucks and special handling attachments.



MOVIE DIGEST

Clark movies enable you to see at your convenience modern machines in action. Synopses of films widely rated "the best in the materials-handling field," and how to borrow them.

These up-to-date publications will prove exceedingly valuable in cutting your handling costs and in getting the utmost benefit from your equipment. They are yours for the asking—any or all of them. Simply use the coupon.

CLARK

**ELECTRIC AND GAS POWERED
FORK TRUCKS
AND POWERED HAND TRUCKS,
INDUSTRIAL TOWING TRACTORS**

CLARK EQUIPMENT COMPANY • Battle Creek 42, Mich.

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Your material of a thousand-and-one uses . . .

NOT woven, not welded, but pierced and e-x-p-a-n-d-e-d from a single solid sheet of sturdy steel! It's Wheeling Expanded Metal—Solid Steel you can see through!

Where you want lightness, use it for additional strength, and stiffness! Where you want strength, use it to save weight!

Wherever you want these qualities...plus free passage for light, for sight, for air, use Wheeling ExM for its all-round characteristics! Write for complete data.

**IT'S WHEELING
EXPANDED
METAL!**



W
Wheeling

WHEELING CORRUGATING COMPANY
WHEELING, WEST VIRGINIA

Atlanta Boston Buffalo Chicago Columbus Detroit Kansas City
Leaksville Minneapolis New Orleans New York Philadelphia Richmond St. Louis

of road will be completed, and approximately 112 miles more of right-of-way will be cleared. A 2,200-ft. tunnel will be finished this month. Footings for the 550-ft. bridge that will span the Moise River at the north end of the tunnel are in the final stages; and steel is on hand for the bridge.

At one point where the railroad will span the Menihok River, there is a considerable drop in the river's level, so a dam will have to be built across the river and its rapids. At the same point, Iron Co. of Canada—biggest customer for the ore—will build an 11,000-kw. hydroelectric plant. Plans for a larger electrical installation in the Eaton Canyon section (far to the north in the Quebec area) haven't been scotched—just postponed until the mining operation reaches its full potential.

There are three fully equipped camps with all facilities for housing from 100 to 300 men, together with operating and maintenance equipment.

Contracts for 2,400 ore cars to carry the ore to Seven Islands will be awarded this year. The cars will be delivered in 1953 and 1954. Contracts will also be let this year for 54 diesel locomotive units (1,600 hp. each unit) for delivery in 1953.

Air strips have been cut out and are in use at two mileposts.

• **In the Field**—As for field operations on the ore bodies, M. A. Hanna Co. of Cleveland and Hollinger Consolidated Gold Mines, Ltd., of Canada are doing detailed drilling on the three or four ore bodies that are to be opened up first to open-pit mining operations. Drilling operations are being carried on to make sure that the town site and railroad yards will not be built over ore deposits.

Highway Tax for Trucks

New York State is already adding up the benefits it expects from the Highway Use Tax that will go into effect Oct. 1. The estimated total is around \$12-million a year.

The tax, to be known as the Truck Mileage Tax, is supposed to distribute more equitably the burden of the cost of highway construction, maintenance, and policing. It will apply to the estimated 150,000 vehicles having a maximum gross weight of more than 18,000 lb. operating on New York State roads.

First step is to get a permit. That's issued by the Truck Mileage Tax Bureau of the Dept. of Taxation & Finance, Albany, costs \$5. After that, the tax is based on two factors: (1) maximum gross weight; and (2) a monthly report on number of miles operated in New York State. The law applies alike to interstate and intrastate operations in New York, regardless of where the vehicle is registered.

Two Fast Daily LCL Merchandise Cars of a FLEET Operated by The Minneapolis & St. Louis Railway (via the Peoria Gateway)



Between points in the Great Midwest and cities of the East and South, Less-Carload-Freight moves Faster over the M. & St. L. and its time-saving Peoria Gateway Connections.

Typical examples of Thru Cars

1. Thru Car, Twin Cities to Indianapolis, M. & St. L.-N.Y.C.
2. Thru Car, Indianapolis to Twin Cities, N.Y.C.-M. & St. L.

BOTH ... Schedule 3rd Day Arrivals
BOTH ... Are Routed via the Great Peoria Gateway
BOTH ... Boost Outstanding Performance Records

in Daily LCL Service via the M. & St. L., saving Hours and even Days of Time in Transit on merchandise shipments, are these, east and westbound, between the Twin Cities of Minneapolis-St. Paul, Minnesota, and Indianapolis, Ind.

BOTH ... Tie in Directly with New York Central's Pacemaker Merchandise Service at Indianapolis, providing Fast Schedules between Twin Cities and Eastern Points

For information on M. & St. L. Fast LCL Service write, wire or phone for 1951 Merchandise Freight Schedules:

The MINNEAPOLIS & ST. LOUIS Railway

MERCHANDISE TRAFFIC DEPARTMENT

111 East Franklin Avenue

Minneapolis 4, Minnesota



When it's LCL...



Ship M. & St. L.

MODERNIZED PORT



*speeds shipping
simplifies handling
cuts mine-to-market costs*

Tournadozer spreads nitrate from conveyor discharge in storage plant, rehandles it later for delivery through batchways to dock conveyor system.

When the new Nitrate Storage and Shipping Plant of Iquique, Chile, was opened last year under the auspices of the President of the Republic, it meant a great deal to the government, the mines, and the people of Chile in improving their world marketing position on a product of great importance to their national economy.

In its first year of operation, these new and very modern facilities, costing 61 million pesos, have shown their ability not only to reduce costs, but also to speed and simplify delivery of Chilean nitrate to world markets.

Major economies were made in:

- 1 Transferring storage from inland production plant to port, so that peak loads of railroad transportation and loading delays are avoided and costs reduced.
- 2 Mechanized unloading, storage, and reloading-to-ship operations utilizing a complete system of belt conveyor transportation so that handling costs are materially lowered.
- 3 Faster loading and adequate port storage that shortened ship time at dock, and eliminated ship delays waiting for nitrate, considerably reducing ocean transportation costs.

The entire Storage and Shipping Plant for the Port of Iquique was constructed and is operated by the Compania Salitrera de Tarapaca y Antofagasta for the Chilean Nitrate Sales Corporation.

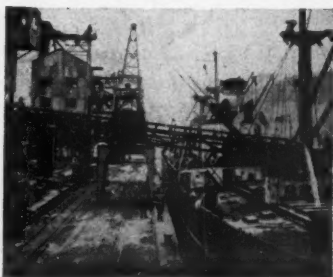
LETOURNEAU

R. G. LeTOURNEAU, INC.
Peoria, Illinois

Tournadozer speeds bulk storage

The two storage plants have capacity for 88,000 tons of nitrate. In them, a rubber-tired LeTourneau Tournadozer spreads nitrate for maximum storage capacity; later, pushes it through batchways onto conveyor for delivery to ships. Tournadozer's blade carries average of 2½ cu. yds. of material. Rubber tires protect the concrete floors. This 19 m.p.h. dozer on rubber also does emergency hauling and maintenance around port and plant.

A survey of your material handling may indicate similar opportunities for use of modern machines and methods to improve your production and your marketing position. Your LeTourneau Distributor will be glad to study your problems and make suggestions that may prove profitable for you.



From our unloader to ship, handling is 100% by conveyor. Hopper feeds belt conveyor which delivers nitrate to shuttle conveyors in storage plants.

READERS REPORT

Who's to Blame?

Sirs:

It appears to me that your editor has fallen into the same pattern of thinking that the heads in Washington have used for years: that of grouping. Your editorial "Ability to Pay: Tax Doctrine in Transition" [BW—Jul. 14 '51, p140] demonstrates this.

Very few will dispute that, outside of government profligacy, inflation is caused by those in the income bracket below the \$10,000 line, but it is not everyone in that bracket. The fellow who earned \$6,000 or \$7,000 five years ago and is still earning the same is not creating inflation. It is the fellow who was earning \$3,000 and is now earning \$6,000 or \$7,000 who is doing the damage, along with the government. Therefore, it should be this extra inflationary income that the government takes off the market.

Incomes could be averaged for a period, with a specified minimum average, and the excess now over the average could be more heavily taxed.

B. A. J. MOSEY

RICHMOND, VA.

Sirs:

I was very much interested in reading your editorial on percentage magic in your issue of July 14th. This hits the issue right on the nose, and I think these facts should be hammered home to Congress with the ultimate aim of some day getting an equitable tax bill.

However, I want to take issue with you on one point that you have made because this factor seems to be more or less taken for granted by most writers on economic subjects, and I think it is very much in error. This is the point that higher income taxes have a deflationary effect.

My own personal contention is that exactly the opposite is true—at least under present conditions. I will grant you that if the higher taxes are used to retire the public debt then they might be considered as deflationary. However, in a deficit financing economy when the government is spending every cent it takes in and a little more besides, these increased income taxes become definitely inflationary. In essence, when you say they are not inflationary, you are saying that the government can spend our money better than we can spend it ourselves. I think we all realize that this is not the case, at least speaking from an efficiency standpoint.

Figures on savings show that at least part of our personal incomes are going into savings banks where they are taken out of the inflationary category. None

Let Corning Blown Glass Shape a New Answer to Your Material Bottleneck

There's a lot of sense in looking at glass as a material to eliminate production bottlenecks. Time and again, Corning has proved glass the most practical and economical material. Its ready availability merits consideration, too.

Blown glassware lends itself to many hollow shapes . . . like those shown. Superior gloss or finish can be obtained, where required. It provides light weight yet strong construction. Blown ware is adaptable to further fabrication such as hermetic sealing or tubulating. Automatic operation is economical for runs of 25,000 pieces or more. Close tolerances can be maintained also.

But, whether specifications call for blown ware, pressed ware or tubing, Corning offers glass with the right qualities—such as heat indifference, electrical stability, chemical inertness, permanent finish and so on. The important thing to remember is that our scientists and engineers are solving material bottlenecks with glass today. Let's see what we can work out together. Many useful ideas are covered in the booklet, "Glass, its increasing importance in product design." Send for it today.

- | | |
|--------------------------|----------------------------|
| 1 Cylinders | 5 Sterile solution bottles |
| 2 Lamp chimneys | 6 Lighting globes |
| 3 Coffee maker parts | 7 Laboratory glass |
| 4 Beverage servers | 8 Pharmaceutical bottles |
| 9 Electrical bulb blanks | |

1851 *Corning means research in Glass* 1951

Corning Glass Works
20 Crystal St., Corning, N. Y.

I'd like to have a copy of "Glass, its increasing importance in product design."

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____





Why **EVERY** Metal Working Plant Needs **DoALL Gage Blocks**

DoALL Gage Blocks measure in millionths. Does every plant need such accuracy?

YES—to control tenths and thousandths. The Tool and Gage Makers Tolerance Chart reveals that to produce a shaft to $1.000 \pm .005"$ tolerance:

1. The *Working Gage* at the machine must be accurate to $\pm .0005"$, ten times that of the part.
2. The *Inspector's Gage* must be accurate to $\pm .00005"$, ten times that of the working gage.
3. The *Master Gage* which checks the inspector's gage must be ten times more accurate or $\pm .000005"$.

There is your requirement for *millionths accuracy*—and with it you'll cut rejects to the vanishing point.

This kind of accuracy is not a luxury. DoALL Gage Blocks are economical, long-lived *working tools* for checking not only other gages but finished parts as well.

For example, with a set of 83 DoALL Gage Blocks and several accessory pieces you can make 120,000 different *snap gages* for about $\frac{1}{4}$ cent each! And these are gages accurate to millionths, with dimensional stability that keeps them accurate.

Ask to have a **DEMONSTRATION** of DoALL Gage Blocks in your plant. There are none finer. See for yourself. Call your local DoALL Sales Service Store or write:

THE DoALL COMPANY

254 N. Laurel Ave., Des Plaines, Ill.

GS-18



WRITE FOR LITERATURE and ask about DoALL Gage Block **CALIBRATION SERVICE** that assures you of faithful accuracy.

INDUSTRY'S
NEW
TOOLS

DoALL

27
SALES-SERVICE
STORES



Machine Tools . . . Tapping Equipment . . . Tool Steel . . . Hand Tools . . . Metal Working Supplies

of the government's finances has anything comparable.

ELMER F. WAY

SECRETARY & GENERAL MANAGER,
MARKING DEVICE ASSN.,
CHICAGO, ILL.

Sirs:

I am wondering if anyone in your organization read both of your editorials in your July 14 issue. I class them as inaccurate with conflicting meanings for the same word. The title to the second editorial should be "Deflation by Hammer." I know you know that when a penny is treated so it will buy what five pennies ordinarily buy, this penny's purchasing power has been increased. Perhaps your writer wished to be humorous. Is inflation something to joke about?

The "Ability to Pay: Tax Doctrine in Transition" editorial also indicates a lack of understanding of the cause of inflation. I find no fault with the treatment of the tax matters, but one statement reads: "But cutting the civilian living standard is the core of the economic aspect of defense until expanded output gives us both guns and butter. If we don't, there is only one alternative: more inflation."

WILLIAM SIEGERIST

PRESIDENT AND TREASURER,
THE MEDART CO.,
ST. LOUIS, MO.

• BUSINESS WEEK intended its first editorial to be light-hearted.

"Thermos" Trouble

Sirs:

My attention has been called to an inadvertent error on page 149 of the July 7 issue.

In the story "Japan Makes a Bid . . ." there appears a picture of some people examining vacuum-insulated bottles. The art lines read: "HOME PRODUCTS: Thermos bottles looked good to buyers. So did sewing machines."

The word "Thermos" is a registered trademark, and the property of The American Thermos Bottle Co. It properly may be applied only to products of this firm carrying that trademark. Quite obviously, any vacuum bottle made in Japan is not "Thermos" brand.

WILLIAM M. HUTCHISON

VICE-PRESIDENT,
KEELING & CO., INC.,
INDIANAPOLIS, IND.

• BUSINESS WEEK thanks reader Hutchison for reminding us that the word "Thermos" is a registered trademark.

Regent Street Note

Sirs:

For years I have been an annual visi-

Get rid of oxygen by high vacuum

INSTEAD OF TRYING TO DILUTE IT

FINE METAL, MOLYBDENUM—outstanding in its resistance to stress at high temperatures when used as a major constituent. You run into trouble with oxygen, though, if you try to melt and cast "moly" into sizeable ingots that are ductile and malleable:


Rather, you *would* run into trouble if you didn't do it under high vacuum. Nowadays, however, working under high vacuum at the 4750° F. melting point of molyb-

denum is not only feasible—it isn't even very expensive!

That's due to the development by DPi for the metallurgical and process industries of unique non-mechanical oil ejector pumps. They permit you to maintain sizeable volumes at pressures as low as 10 microns Hg, sweeping out all gas rather than trying to get rid of oxygen by dilution. It's more effective that way and less costly with these pumps. DPi now

builds them to handle well over 10,000 cubic feet per minute at very low pressures and at far less cost than with older types of vacuum pumps:

For full information about them (or about anything else related to high vacuum for metallurgy), write *Distillation Products Industries, Vacuum Equipment Department*; 739 Ridge Road West, Rochester 3; N. Y. (Division of Eastman Kodak Company):



high vacuum research
and engineering

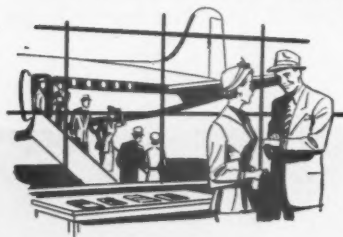
DPi

Also . . . vitamins A and E . . . distilled monoglycerides . . . more than 3400 Eastman Organic Chemicals for science and industry

American Blower...a time-honored name in air handling



Birmingham, Ala., has a conveniently located American Blower Branch Office to provide you with data and equipment for air handling. You can reach American Blower in Birmingham by calling 7-2383. In other cities, consult your phone book.



TEMPERATURES TAMED...

Passengers and employees alike appreciate the pleasant atmosphere created by American Blower Air Conditioning Units in a large southern air terminal. These units circulate cool, conditioned air and maintain comfortable temperatures the year round. American Blower Air Conditioning Units are widely used in commerce and industry to cool and dehumidify in summer, heat and humidify in winter. Users find this dual function by the same unit saves them money. May American Blower help you?



BAKER'S DELIGHT...

A large midwest bakery recently installed several smartly styled American Blower Ventura Fans in its new, modern plant. Result—cleaner, pleasanter

working conditions, improved employee efficiency. Ventura Fans maintain air circulation by exhausting hot, stale air quickly and efficiently. They are ideal for ventilating shops, factories, offices, and in many other applications. All carry Certified Ratings and are sound-rated for quiet operation. Good ventilation is good business in your plants, too.



NOW IS THE TIME...

Plan now for winter heating. If your present heating system is inadequate or inefficient, replace or supplement it with American Blower Unit Heaters. These efficient Unit Heaters distribute heat evenly over a wide area, assure comfortable final temperatures everywhere. In many installations, American Blower Unit Heaters have paid for themselves in fuel savings alone within two to three years! Models for steam or hot water heating systems, also self-contained, gas-fired models.

Whether your needs are civilian or military, American Blower heating, cooling, drying, air conditioning and air handling equipment contributes toward improving over-all comfort and efficiency. For data, phone or write our nearest branch office.

AMERICAN BLOWER CORPORATION, DETROIT 32, MICHIGAN
CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONTARIO

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

YOUR BEST BUY AMERICAN BLOWER AIR HANDLING EQUIPMENT

Serving home and industry:

AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KENAMER BOILERS • ROSS HEATER • TONAWANDA IRON

tor to your country. On an average I have spent two months each year over there and have noticed during my visits how exaggerated your newspapers are in the majority of their reports concerning the happenings in Britain.

In the issue of July 7, 1951, on page 152, I have read your comment entitled "Fashion Note." I have always maintained a staunch reliance on the information you publish in BUSINESS WEEK, but I cannot help but write you on the comment to which I refer.


Your statements are completely wide of the mark. To start with, we, like many other firms, have direct connections in America and get many American visitors to our plant. When they have stayed with us for some little time, they all express amazement at the conditions as they exist in England, on the smartness of British women, and, indeed, on the smartness of British businessmen. They all put their amazement down to what they themselves have read in American newspapers and other publications. I think that BUSINESS WEEK should make it its job to get your representatives in Britain to check up on the picture you paint under "Fashion Note." Ask them to go into any of the cafes, hotels, theaters, or picture places in London, or in any of the provincial towns, and observe how British women are dressed. If you get an accurate picture from what I suggest, you will completely change your ideas and perhaps write something in BUSINESS WEEK that will completely portray the position as it truly exists in Britain.

I am not writing this letter to be destructively critical. I am doing so merely with the thought of helping you to get on the right track. I read your publications because I believe them to be extremely well written and, indeed, accurate almost all the time, and it is only because the comments in your article are so completely wide of the mark that I could not restrain myself to preserve silence.

A. YORKE SAVILLE
CHAIRMAN & MANAGING DIRECTOR,
BRITISH JEFFREY-DIAMOND, LTD.,
WAKEFIELD, YORKS.,
ENGLAND

• BUSINESS WEEK defers to no one in its admiration of British women for the way they have made the best of post-war austerity. But sometimes we like to speculate on what they could do if their Sir Hartley Shawcrosses didn't prescribe so much stinting.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 18, N. Y.



Inland's interest in your
steel problems does not stop
at our shipping dock.

*"Let's try changing the
blanking direction", said Cliff*

Recently, a large automobile manufacturer was concerned with results of a difficult deep drawing operation . . . the fabrication of steel oil pans. These pans were made from Inland's fully aluminum killed cold rolled steel sheets. For six months, these sheets had been ordered to a thickness of .048" and cut to length 35 $\frac{1}{4}$ " x 43"—and breakage had run to 3.92% of approximately 36,000 oil pans manufactured.

When Cliff Baker*, one of Inland's mill representatives, was given the problem, he suggested changing the blanking direction—inserting sheets in the stamping machine at right angle to the previous direction.

This meant a simple change in the ordering procedure. The customer changed his dimensional specification for these sheets to 43" x 71" so that the direction of rolling and the subsequent direction of steel grain would conform to this suggested practice.

Result: In the following six months, breakage was reduced to 0.75% of 30,000 oil pans fabricated. The number of oil pans scrapped was cut from over 1,400 to approximately 230 in these two six-month periods! INLAND STEEL COMPANY, 38 South Dearborn Street, Chicago 3, Illinois.

**Not actual name*

Your scrap is needed
by the steel industry
for national defense.

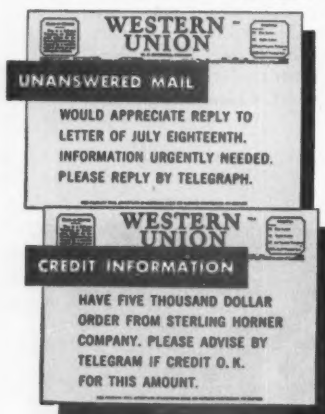


*The
"YELLOW BLANK"
never forgets!*

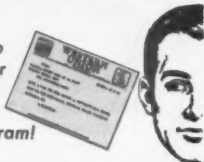
Avoid costly misunderstandings
Leave nothing to memory!
Confirm every important verbal
message by Telegram.
Fast! Efficient! Low Cost!
... and a permanent record!

For any business purpose

A TELEGRAM DOES THE JOB BETTER



It won't go
in one ear
and out the
other when you
send a telegram!



MARKETING

(Figures in billions,
annual rate, seasonally adjusted)

1 With this income after taxes...

| 1950 | |
|-------------|---------|
| 1st Quarter | \$197.3 |
| 2nd Quarter | 197.5 |
| 3rd Quarter | 207.1 |
| 4th Quarter | 215.2 |

| 1951 | |
|-------------|-------|
| 1st Quarter | 217.5 |
| 2nd Quarter | 220.0 |

2 ... people spent this much...

| |
|---------|
| \$184.7 |
| 188.7 |
| 202.5 |
| 198.4 |

| |
|-------|
| 208.2 |
| 200.0 |

4 NOW with this probable income...

| 1951 | |
|-------------|---------|
| 3rd Quarter | \$221.5 |
| 4th Quarter | 223.5 |

| 1952 | |
|-------------|-------|
| 1st Quarter | 226.5 |
| 2nd Quarter | 230.0 |

5 ... they'll spend this much at their present rate of saving (9%)...

| |
|---------|
| \$202.0 |
| 203.0 |

| |
|-------|
| 206.0 |
| 209.0 |

Data: McGraw-Hill Economics Dept.

Consumer Spending: Bound

The consumer is about ready to stop dragging his feet. He has money to spend, and he's on his way down to the store to spend it.

He's had a lot of money right along, all through the past few months. But instead of laying it out for goods he's been saving it—at a rate unprecedented in the postwar era.

• **Slow Start**—While all the other economic indexes—government spending, disposable income, capital expenditure by industry, gross national product—have bounded upwards, retail sales have lagged. In the midst of prosperity we have seen the anomaly of inventory gluts, cutbacks in retailers' orders, trimming of summer production schedules by consumer goods makers.

But as one retailer put it last week, "Most Americans just can't stand to have money burning holes in their pockets."

There's no buying boom in the making like the scare buying of last July and January. But sometime this fall, increased consumer spending is going to make itself felt at the retail counter.

• **Must Go Up**—There's almost no way for spending to go but up. Disposable income is steadily forging ahead at a rate of about \$1-billion a month. This

alone means greater consumer spending—even if people continue to go on saving at the present unusually high rate.

Even assuming that they do, personal consumption in the third quarter would wind up just a shade under last year's third quarter, which included the July spending spree. By the fourth quarter it would surge ahead of last year's rate. And by mid-1952 consumer expenditures would be charging ahead at just about the level for the first quarter of this year, which in itself was a record.

• **Back to Normal**—But that's probably the least you can expect. If, as seems likely, the consumer goes back to a more normal ratio of spending and saving, new sales records would automatically follow without question.

The savings rate has been out of line with anything since the wartime days of shortages, rationing, and Treasury bond drives. In the second quarter, consumers saved no less than 9% of their disposable income. Most of the time since World War II, saving has ranged from approximately 3% to 6%.

Assume, then, that saving goes back to about 6%. In that case, as the table shows, consumer expenditures by the

**3 ... and saved
this % of their
after-tax income**

6%
4%
2%
8%

4%
9%

**6 ... and spend this much
at a more normal
rate of saving (6%)**

\$208.0
210.0

213.0
216.0

©BUSINESS WEEK

to Rise

fourth quarter would conceivably be running at a new high level, never equaled except in the first quarter of this year.

I. The Tide Turns

This picture underlies the optimism of retailers across the country. To a man they tell you that they expect good business later this year. Their only area of disagreement is the date of the upturn.

Some retailers are inclined to put it in the third quarter, some early in the fourth quarter.

What they will be getting then is the steady, strong wave of spending that we expected to get—but didn't—before this.

Ever since Korea, people have been eyeing the booming defense economy and wondering when spending would move up to a new plateau. But what they got instead was a series of violent swings—the fabulously high sales peaks of July and January, the deep troughs following them.

• **Surprises**—Some unexpected happenings threw the guesses off.

Instead of bogging down in shortages, industry proceeded to pour goods out at an unheard-of level. Military orders

Steel warehouse finds machine gas cutting helps fill special orders ... faster — at less cost

BRACE-MUELLER-HUNTLEY, INC., steel distributors in Syracuse, N. Y., noted a growing number of requests for special shapes from customers and decided it should equip itself to handle these cutting jobs. The result would be faster service to its customers and greater profits.



William Burkhardt, Airco Representative, was called in and he recommended machine gas cutting with an Airco No. 6B Oxygraph equipped with a four torch setup and an electronic tracing device.

The apparatus was quickly installed and put into operation. One-day service

was offered to customers requiring intricate as well as ordinary shapes.

Company executives stated that the Oxygraph with the electronic tracing device enabled them to make additional profits and also to handle a wide variety of cutting jobs quickly and easily.

TECHNICAL SALES SERVICE — ANOTHER AIRCO PLUS-VALUE FOR CUSTOMERS

To assure its customers of high efficiency in all applications of the oxyacetylene flame or electric arc, Air Reduction makes available the broad, practical experience of its nationwide Technical Sales Division personnel. The collective experience and knowledge of these specialists has helped thousands to a more effective use of Airco processes and products. Ask about this Airco "Plus-Value" service today. Write your nearest Airco office.



AIR REDUCTION

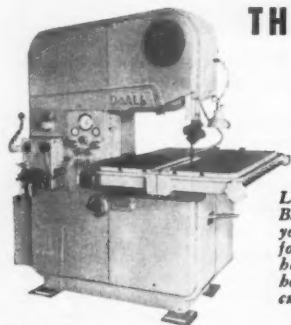
AIR REDUCTION SALES COMPANY • AIR REDUCTION MAGNOLIA COMPANY
AIR REDUCTION PACIFIC COMPANY
REPRESENTED INTERNATIONALLY BY AIRCO COMPANY INTERNATIONAL
Divisions of Air Reduction Company, Incorporated
Offices in Principal Cities

HOW BENEFITS FROM DoALL BAND MACHINING

**Does Work Faster;
Cuts All Kinds of Shapes;
Machines Brass, Bronze, Aluminum, Cast
Iron, Stainless, Hard Tool Steel;
Gets Finer, More Accurate Cuts**

At National Biscuit Company's machine shop in Evanston, Illinois, DoALL Band Machines really earn their keep. They work all the time on all kinds of jobs. They cut any material—even the hardest steel. One job originally calculated to take a week's time was done in three days on the DoALL MP-20. Other work formerly done on milling machines is now done much faster at less cost on DoALL's.

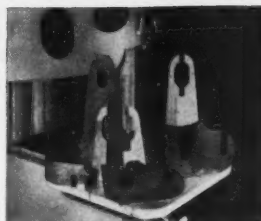
You can have benefits like these. Ask to have a **FREE DEMONSTRATION** of a DoALL Band Machine in your own plant. Call your local DoALL Sales-Service Store or write:



THE DoALL COMPANY

254 N. Laurel Ave.
Des Plaines, Illinois

Learn about jobs that DoALL Band Machining can do for you. Find out about blades for cutting every material; how you can saw, grind, hone, polish, friction saw—cut any shape. Write today.



Sheet steel parts for packaging machinery produced quicker by friction sawing.



Friction sawing steel channel on DoALL Zephyr Band Machine.



Contour sawing irregular shapes from solid steel 2" thick by 14" square.

"... sick and tired of talk about shortages that never showed up ..."

MARKETING starts on p. 112

didn't take the bite we expected out of the economy. With plenty of hard goods available, the anticipated soft goods boom never materialized. The consumer, once fooled, got sick and tired of talk about shortages that never showed up.

Overbuying was another factor. The scare buying booms naturally took a lot of people out of the market. Retailers differ on just how much effect overbuying is still having in depressing sales. But there is no doubt that it is still having some, particularly in hard goods. People have been paying off their instalment purchases made during the scare booms.

• **Prices, Taxes**—High prices, however, were perhaps the most important factor of all. In June, for example, the Federal Reserve Board's latest Survey of Consumer Finances showed that five out of seven consumers thought it was a poor time to buy because prices were too high. They have been waiting since for them to come down.

Still another important factor was the general feeling among consumers that thanks to higher taxes and living costs they were worse off than before Korea.

• **Change Their Minds**—But now the tide is running in the other direction.

It must be obvious to the consumer by now that prices, instead of going down, may well be on the rise again. In this sense Congress' action in softening up price controls may have a stimulating effect on sales. The tipoff to the consumer could well be the car makers' request for a 10% boost in prices—and the fact that they have a good chance of getting it.

To a lesser extent, relaxing of credit terms on cars and appliances may also help to needle sales. The question is how much, since it is uncertain how much strict credit terms hurt sales in the first place. The point is that consumers have had plenty of money with which to buy goods on almost any terms. It's been more a question of willingness to buy.

II. More Cash on Hand

Personal income in the second quarter of 1951 hit a record high—an annual rate of \$247-billion. After allowing for steeper taxes and increased living costs, real income is still about equal to what it was a year ago, when retail sales were so tremendous retailers called it "Christmas in July."

Many people spent their savings

B-2-B



INDUSTRY'S
NEW
TOOLS



27
SALES-SERVICE
STORES



Machine Tools ... Gaging Equipment ... Tool Steel ... Band Tools ... Metal Working Supplies

then, of course. But consumers have even more liquid savings—cash and government bonds—than they did a year ago. And the savings are better distributed. Most families have some available cash, according to the Reserve Board's survey. Furthermore, the greatest increase is in medium-sized holdings—from \$200 to \$2,000.

Before long, people should begin to realize that they're not quite so bad off as they thought.

• **Two Sides**—In a way, of course, it has been fortunate that the consumer felt poor. His ease-off in buying, more than any other factor, has helped to curb inflation. It's the other side of the same picture—the inventory pileup, the slump in textiles, the slackening of consumer goods output—that has not been so pleasant.

III. Concerned, Not Worried

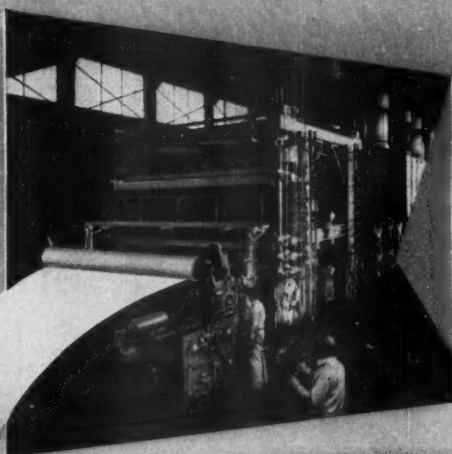
The inventory situation has been something to give merchants pause. One major department store, for example, says that normally its inventory drops about \$1-million between the spring high and July 1. This year the drop was no less than \$2-million. But that still left stocks a thumping \$4-million over the July 1 figure of the past three years.

This example can be multiplied endlessly. Take the case of the variety chain that got panicky after Korea and bought a year's supply of bobby pins. Again there is the midwestern department store that ordered an extra \$1-million worth of "shortage" goods—and got every last cent of them.

• **Worst Is Over**—In general, however, the inventory situation has been on the mend. April saw the worst. At that time department store stocks plus outstanding orders totaled five times sales, as compared with less than four times sales in April, 1950. So new orders placed in April were the lowest—in terms of units—since before World War II. In May stocks on hand and on order were down to 4.4 times sales. New orders were up.

Wholesale inventories, according to the Dept. of Commerce, are also on the wane. In June total wholesale inventories came to about \$9.1-billion, a drop of \$100-million from the month before.

• **No Price Wars**—These declines in inventories have borne out the retailer's position throughout the period of glut. He has not been stampeded. As one retailer put it, "We're concerned about inventories, but not worried." So they trimmed back orders, and they held sales, particularly on refrigerators and other hard goods, where the gluts were the worst. But because they counted on good business ahead, they never felt that they had to copy Macy's tech-

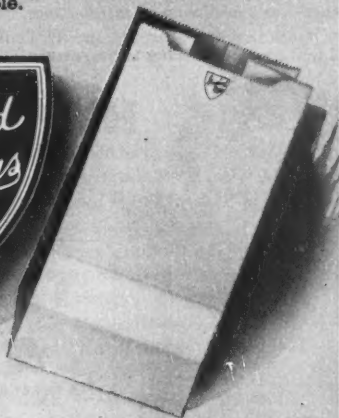


It's the unseen quality that produces true economy in Gaylord Containers

Gaylord Kraft Bag Paper "by the Mile"

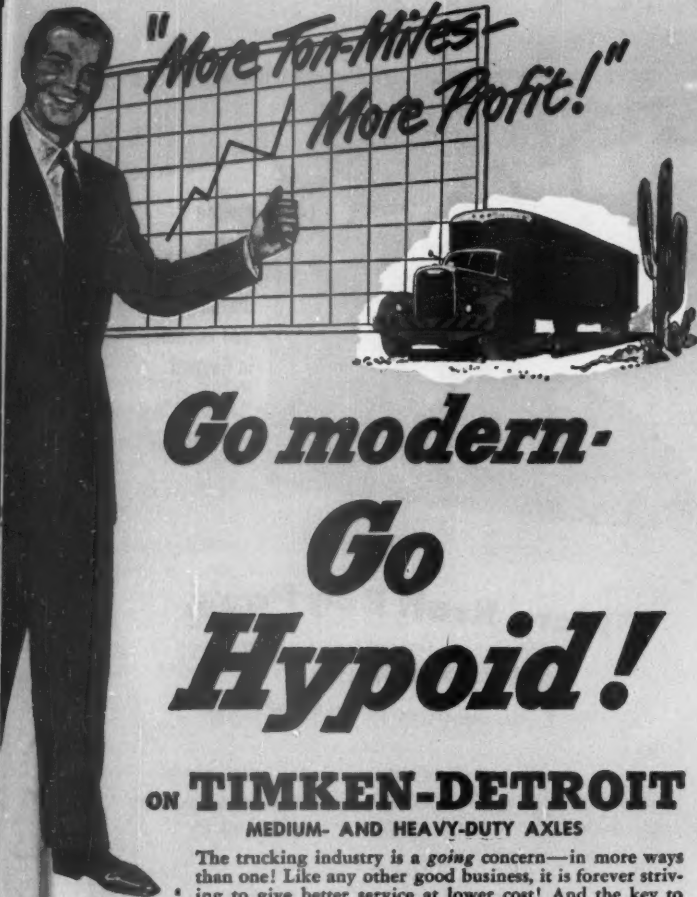
Gaylord's modern paper machines are turning out tons of quality Kraft bag paper 24 hours a day, 7 days a week. And it still isn't enough.

Because Gaylord bags have received such wide acceptance, it is impossible for supply to keep up with demand under present conditions. Every effort is being made, however, to maintain output—so that shipments can be made as regularly as possible.



FOLDING CARTONS
KRAFT BAGS AND SACKS
KRAFT PAPER AND SPECIALTIES
CORRUGATED AND SOLID FIBRE BOXES

GAYLORD CONTAINER CORPORATION
General Offices: SAINT LOUIS



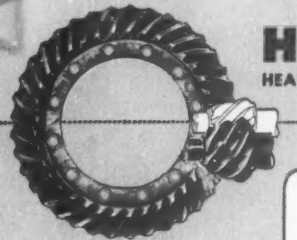
Go modern- Go Hypoid!

ON TIMKEN-DETROIT MEDIUM- AND HEAVY-DUTY AXLES

The trucking industry is a *going* concern—in more ways than one! Like any other good business, it is forever striving to give better service at lower cost! And the key to accomplishing that objective lies in this basic fact: The greater the number of ton-miles per truck, the greater the profits—at lower cost to the shipper!

That's why today you'll see more and more of America's big trucks rolling on Timken-Detroit Axles with Hypoid Gearing! On the highway and off, this dependable axle gearing has *proved* itself under all types of load and road conditions. Its simple, rugged construction provides maximum performance—at a minimum of maintenance.

If you build, buy or sell trucks, specify Timken-Detroit Axles and Brakes! You'll find Hypoid Gearing an important Timken-Detroit feature!



HYPOID HEAVY-DUTY GEARING

The offset Hypoid pinion is bigger and stronger. Bearings are bigger. More teeth are in contact, reducing loading per unit of contact area. Torque-transmitting capacity is increased. Slower gear ratios are practical without loss of strength.

TIMKEN *Detroit* AXLES

A PRODUCT OF THE TIMKEN-DETROIT AXLE COMPANY
DETROIT 32, MICHIGAN



SEND FOR THIS INFORMATIVE ILLUSTRATED BOOKLET ON HYPOID GEARING TODAY! IT'S YOURS FOR THE ASKING!

WORLD'S LARGEST MANUFACTURER OF AXLES FOR TRUCKS, BUSES AND TRAILERS
PLANTS AT: Detroit and Jackson, Mich. • Oshkosh, Wis. • Utica, N. Y.
Ashtabula, Kenton and Newark, Ohio • New Castle, Pa.

"... It's the same old threat of inflationary pressure..."

MARKETING starts on p. 112

nique for trimming inventories through price wars.

Retailers now feel that with the help of a little more price-cutting they will have their inventories in pretty good shape by the end of the summer.

• **Orders Pick Up**—The retail optimism over a bright autumn already seems to be affecting their orders. Rayon fabric mills and converters reported a pickup in ordering last weekend. The Industrial Council of Cloak, Suit & Skirt Manufacturers says there has been "no lack of encouraging indications in the fall retail activity to date."

IV. Could Mean Trouble

Fall spending this year probably won't rise as sharply as it did after the slump in 1949. But it won't have to rise much to make retailers happy. With today's increasing income level, a percentage point or two more of disposable income going into sales means a whale of a business for retailers.

• **Soft or Hard Goods?**—How will the consumer spend his money? All in all, it looks as though the advance in consumer buying will be fairly well spread over both soft and hard goods.

In particular, retailers look for good business this fall in clothing. Part of their optimism is based on the fact that clothing didn't do too well last fall. People will make up for it this fall, they figure.

Although demand for autos and home appliances may not return to late 1950 levels, it should compare favorably with any other period. Commerce Dept. studies indicate a demand, based on current incomes and car ownership, for around 6-million autos a year—over 1-million more than the third-quarter production rate. And we're building close to 1-million houses this year, which will help maintain a healthy market for electric appliances and other home furnishings.

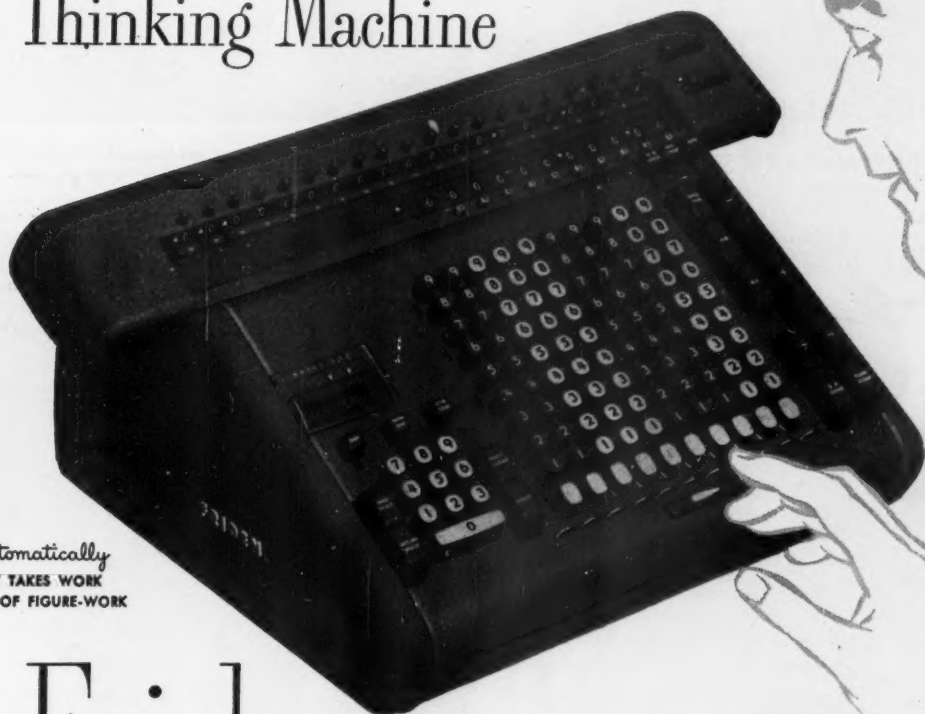
• **Danger Sign**—At this point a red signal starts waving. This demand for hard goods can be satisfied easily enough as long as today's inventories hold. But what about the time when they're exhausted and when output is still cut back because of military demands?

This could happen in the first half of next year—and it spells danger. It's the same old threat of inflation.

A war scare again, on top of the consumer spending that lies ahead, could spell real trouble. If people spent as much of their increased income as in the last buying wave, it would be close to impossible to check inflation.

Office overhead costs shrink when the Friden *fully-automatic* Calculator "thinks" for you. In a single operation this machine actually multiplies, adds and subtracts. It automatically points off decimals...even clears its own carriage

Quickest way to figure Interest is on the Friden - The Thinking Machine



Automatically
IT TAKES WORK
OUT OF FIGURE-WORK

Friden

THE THINKING MACHINE OF AMERICAN BUSINESS

NEW YORK BANK USES FRIDENS

WRITES GUSTAV BOTTNER, JR., VICE PRESIDENT AND COMPTROLLER, DRY DOCK SAVINGS BANK, NEW YORK: "We are using Friden Calculators in our General Bookkeeping Department for setting up bond amortization schedules; in our Mortgage Department for calculating interest due us and in our banking department for calculating interest due our depositors. We find them very satisfactory."

EXCLUSIVE features enable the Friden to handle more steps in figure-work *without operator decisions* than any other calculating machine ever developed.

Once the operator sets a problem on the keyboard — and touches the proper control keys — no additional human motions are required. The Friden automatically "thinks out" accurate answers.

You and the Friden Man will discover important applications of Friden "figure thinking" in terms of your own business.

Figure on a Friden NOW — phone or write the Friden Man near you. Friden sales, instruction and service available throughout the U.S. and the world. FRIDEN CALCULATING MACHINE CO., INC., San Leandro, California.

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Crosscountry Clinic Sells Abrasives for



MACHINE MAKERS SELL:

Bader Machine Co.'s Stephen Bader (seated, left picture) and George F. Grant Co.'s Cliff Marranville (with tie, right picture) show their machines at Behr-Manning's clinic.



ABRASIVES GAIN:

Behr-Manning product engineer Jack Durman gets over a point to General Electric production men: Whatever machine you use, the abrasives count.

Behr-Manning

Crosscountry show lets production men see latest in abrasive machinery. That helps sell B-M's coated abrasives.

Sometimes the best way to sell your product is to sell somebody else's product.

Behr-Manning division of Norton Co. is enthusiastic about this sales approach. It has evolved a way of showing off its own coated abrasives and sanding belts by showing off the latest technical developments in the abrasive machinery field.

• **Road Show**—To do the job, B-M is taking around the country a Grinding & Polishing Show. Each show, held in B-M's own demonstration rooms, is a clinic on the latest developments in grinding and polishing machinery. That's a lure a production man finds hard to resist.

"We're taking new methods to manufacturers," says a B-M spokesman. "If a machine is sold as a result, we hope we'll get the coated abrasive business that goes along with it."

• **Boston First**—The first big clinic was held in Boston this summer. The next one is scheduled for Chicago in the fall. From there the show will move from city to city, coast to coast.

Some 165 manufacturers—all potential buyers of abrasive machinery—turned out for the Boston affair. The Lynn (Mass.) plant of General Electric, for example, sent four men over for the first of the five-day sessions, then sent seven more to see the machines.

• **Small-Scale Start**—B-M has been doing this kind of clinic work on a smaller scale since the war. It set up 15 demonstration rooms attached to its branch warehouses and sales offices in various cities, plus headquarters in Troy, N. Y.

Then new methods and new machinery kept popping up so fast that B-M decided to expand its demonstrations into clinics for a whole region. It stocked up with brand-new equipment, invited the machinery makers to show off their own machines. Sometimes the company head comes along and rolls up his shirt sleeves.

• **Tailored**—Each demonstration room is equipped with the latest machinery of the kind that is used in that particular area. In furniture towns—Grand Rapids and High Point, N. C.—the machines used in finishing and making furniture get the big play. In Detroit it's machinery for auto production. The Chicago clinic will stress metal finishing.

Machinery makers get tips from the

On-Off... On-Off... On-Off... 10,000 TIMES!



TODAY'S BEST and safest electrical circuit protection employs devices called circuit breakers. After a short circuit has been corrected, service is re-established by a flick of the breaker's handle. But circuit breakers must be absolutely dependable. Underwriters' Laboratories, Inc., requires tests which prove, among other things, correct calibration, safe performance under overloads and short circuits, and ability to operate 10,000 times without mechanical failure, welding, undue pitting or burning of contacts. The Underwriters' label on Federal Noark circuit breakers is assurance of reliability far beyond actual service requirements.

Millions of Breakers

In the past year Federal Noark developed manufacturing methods which enable it to sell circuit breakers at remarkably low prices. The trend to breakers was vastly stimulated and, in 1950, Federal produced millions to meet the growing demand.

Federal a Nation-Wide Producer

Making circuit breaker protection readily available everywhere is one of a dozen recent revolutionary Federal Noark developments. Since World War II, Federal has become a leading factor in the design and manufacture of control equipment for light and power.

One after another, new plants have been acquired to meet the call for Federal Noark products, and five large Federal plants are today operating at full capacity from coast-to-coast.

FEDERAL ELECTRIC PRODUCTS COMPANY
Main Office: 50 Paris Street, Newark 5, N. J.

**FEDERAL NOARK
MEANS
BUSINESS!**

FEDERAL NOARK

Plants at Newark, N. J.; Long Island City, N. Y.; Hartford, Conn.;
St. Louis, Mo.; Los Angeles, Calif.





Courtesy E. F. Britten & Co.

Gets the edge on a stubborn lawn

Everybody likes a well-kept yard, but nobody likes to trim grass . . . especially around trees and along lawn edges where it takes tedious hand work. To ease the strain on home gardeners' backs, Trim Master, Jr., a compact and lightweight power-driven tool is now available.

This efficient, timesaving trimmer comes in gasoline-driven and electric models. Suction from its whirling steel blade stands grass straight up, so it's neatly clipped. Both models are made to take the knocks of outdoor wear with vital resilient parts of Du Pont neoprene. Neoprene fuel hose, washers, and motor mounts won't crack or rot away from weather, lubricating oil or garden chemicals. And the elec-

tric Trim Master's neoprene cord resists sunlight, scuffing and abrasion when it's dragged around the yard.

Neoprene is no stranger in the garden. It has proved its exceptional durability in garden hose that withstands all the hazards of outdoor use season after season for many years. And fabric gloves coated with long-lasting neoprene have become a standard article in most gardeners' equipment.

For more information about neoprene, write for our booklet "Design for Success with Neoprene." It describes neoprene's properties and many of its important uses.

E. I. du Pont de Nemours & Co. (Inc.)
Rubber Chemicals Division
Wilmington 98, Delaware

BETTER RUBBER PRODUCTS ARE MADE WITH

NEOPRENE

NEOPRENE RESISTS:



BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

OXIDATION • HEAT • SUNLIGHT • OZONE • OILS • GREASE • FLAME • CHEMICALS • FLEX-CRACKING • AGING • ABRASION

demonstration rooms even when the clinics aren't on. Cadillac sent over production people to the Detroit room for several weeks to work on a polishing technique, wound up buying new equipment. That was fine with Behr-Manning; the new equipment used its coated abrasives.

The machinery makers are glad to take orders on the spot. At the Boston show they did make some sales. But even if they don't, they feel that the clinics mean goodwill and may mean sales some day—for them and for B-M, too.

Labeled Furs

New bill will compel fur industry to stick to facts when labeling skins. That means a muskrat can't be "mink-dyed."

Congress has passed a new fur labeling bill that makes previous attempts to bring the wolf out from under sheep's clothing look sick (BW—May 21 '49, p. 26). The bill is now waiting for the President's signature.

The new legislation makes it illegal under the Federal Trade Commission Act to misbrand any fur product at any stage of the game—from manufacture, distribution, promotion, or on invoices. Anyone who doesn't comply will have FTC after him.

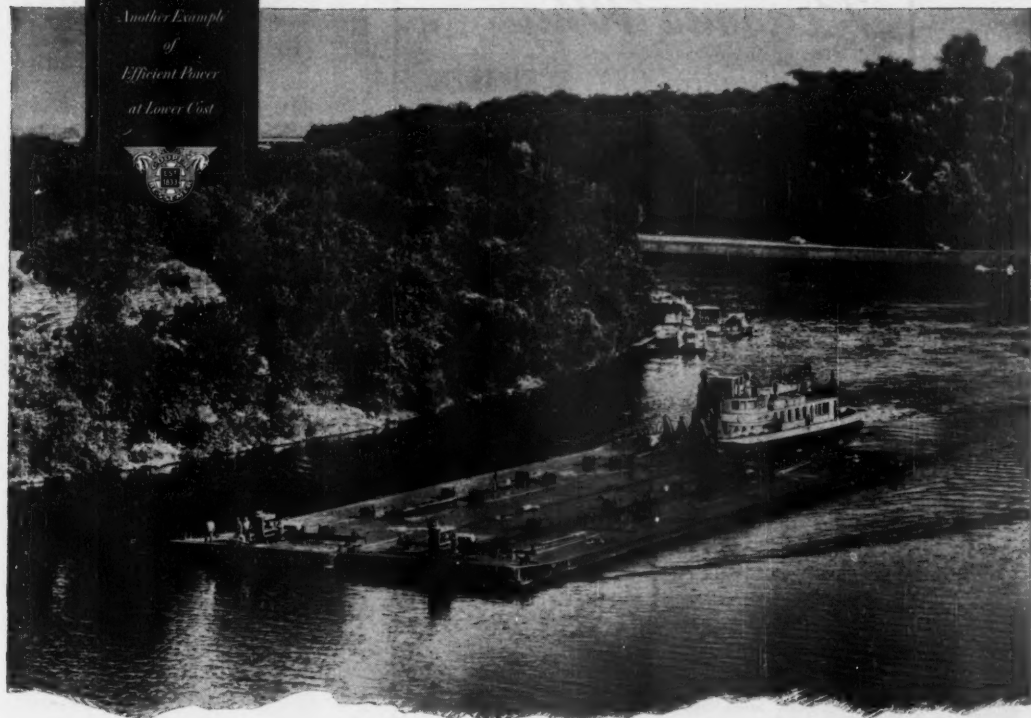
• **Glossary**—The bill directs FTC to set up a Fur Products Name Guide within six months after the bill becomes law. The Depts. of Agriculture and Interior, as well as the industry, will help on this. There's to be no fooling around; the guide will list the "true English names" of the critters in question. If there aren't any true English names, it will settle for a name by which the animal is identified in the U. S.

• **Label Tells All**—The label, invoice, and advertisement must show not only the name of the animal involved. They must also indicate whether the product is made of used fur; whether it has been bleached, dyed, or artificially colored; whether it is made entirely or mostly of paws, tails, bellies, or waste furs; and the country of its origin.

Fur-labeling requirements aren't new. The day of the Hudson seal coat has been dead for some time; it now has to be identified as dyed muskrat. But the new bill would go further, says Louis Weber, attorney who worked on the draft. Take the case of mink-dyed muskrat. The new bill would permit no bow to the minklike appearance of the product; it would come out muskrat, plain and simple, Weber says.

• **Boost for Home Products**—When it comes to the country of origin, the fur

Another Example
of
Efficient Power
at Lower Cost



EFFICIENT WORK-PLAN FOR OLD MAN RIVER ... now a bulwark of defense!

LOW-COST diesel power has long since taken over old man river... has made it possible to get far more work out of such arteries of transportation than ever before. Today our navigable rivers are alive with powerful work boats, pushing incredible loads of oil, gasoline, coal, ore and scores of other defense-crucial materials.

Take the towboat pictured above... it's not uncommon for a work boat like this to push tonnages equal to four freight train loads. It's one of hundreds of Cooper-Bessemer-powered work boats in all kinds of marine service from fishing trawlers to ocean-going cargo ships.

In peacetime, diesel marine transportation helps deliver America's needs at lower cost. In times of national emergency, as now, it's another *bulwark* of defense!

For 118 years, through five national emergencies, Cooper-Bessemer has been helping to solve and meet America's power needs on water and land. If you have a need for defense-supporting power, find out about the *new* things being done by one of America's *oldest* engine builders.

The
Cooper-Bessemer
Corporation

MOUNT VERNON, OHIO

GROVE CITY, PA.

New York • Chicago • Washington • San Francisco • Los Angeles
• Houston • Dallas • Odessa • Seattle • Tulsa • St. Louis • Gloucester
• New Orleans • Shreveport

DIESELS • GAS ENGINES • GAS DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS

Reasons Why THE Finnell DRY SCRUBBER CLEANS FASTER . . . More Thoroughly

A unique combination of labor-saving features is responsible for the greater speed and thoroughness with which the Finnell Dry Scrubber cleans grease-caked floors.

Equipped with two powerful scarifying brushes, this Finnell digs through and quickly loosens even the most stubborn coatings of dirt, oil, grease, and shavings. Special couplings adjust brushes to floor irregularities, to get into indentations and grooves that rigid coupling brushes would pass over and miss.

To re-sharpen the brushes of the Finnell Dry Scrubber, simply flip the switch. That reverses the motion of the brushes and re-sharpens them automatically . . . while working. Eliminates the need for frequent changing of brushes by hand in order to maintain a good cutting edge.

Low construction makes it easy to clean around and beneath equipment, and the adjustable handle adapts the machine to operator's height for most effective working position.

Various types and sizes of wire scarifying brushes are interchangeable in the brush rings of this Finnell and, with other brush rings, the machine can be used for wet scrubbing, steel-wooling, waxing, and polishing. Ruggedly constructed. Has heavy duty G. E. Motor, oversize Timken Roller Bearings, special bronze worm gears, leak-proof gear case.

For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3808 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

Reversible Switch
re-sharpens brushes automatically

Adjustable Handle
adapts machine to operator's height

Low Gear Case
allows cleaning beneath equipment

Flexible Brushes
adjust to floor irregularities

FINNELL

FINNELL SYSTEM, INC.

Pioneers and Specialists in
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES
IN ALL
PRINCIPAL
CITIES

industry throws up its hands. How, it asks, is a manufacturer going to identify on his label the origin of every paw and tail that goes into a single coat?

Apparently the more rigorous requirements are the result of pressure from American mink growers; they feel a customer naturally tends to pick a U. S. product against Siberian squirrel, say. Fur circles aren't sure it will always work this way. They feel that the American woman, out to blow herself to a mink coat, will rate Canadian mink higher than home-grown.

Besides, the trade argues, a new law won't stop the unscrupulous fur dealer. If he's going to misbrand, he'll misbrand anyway.

MARKETING BRIEFS

An upturn in TV set sales will come in September, manufacturers think. Their chief hope is in the replacement market among owners of old 10-in. and other smaller-screen sets. To needle business, they're introducing new fall lines.

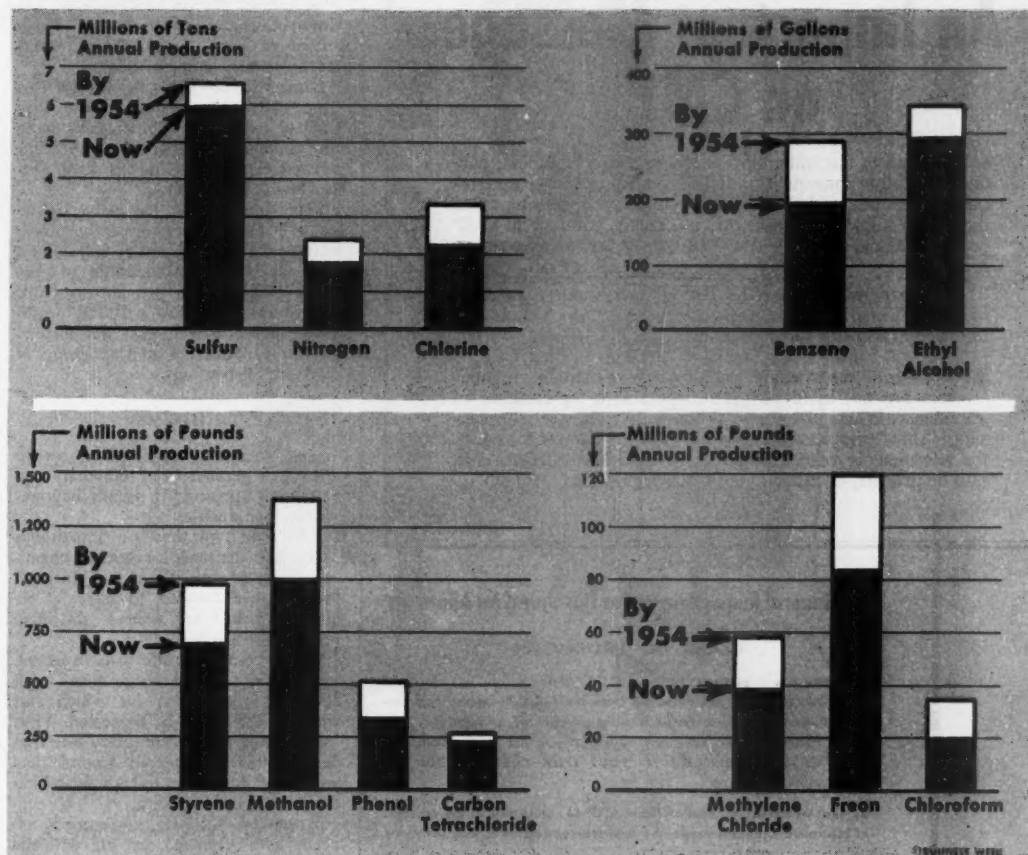
Purchased: F. S. Rasco & Co., West Coast variety chain, by Founders, Inc., which owns control of Gamble-Skogmo. President B. C. Gamble of Founders says that Rasco will "continue as an integrated operation completely independent of Gamble-Skogmo." Rasco has 49 stores, is doing an annual business of about \$5-million.

Seth Thomas, venerable clock maker, now a division of General Time Corp., is going in for jeweled wrist watches for the first time. The watches have Swiss movements, retail from \$30 to \$67.50.

Fair trade notes: A California court opined that the state fair trade law does not apply to the prices of goods made within the state when they are sold both intrastate and interstate. The court thus denied a preliminary injunction brought by Cal-Dak Co. against a druggist. . . . A court case brought by a drug wholesaler against Hess Bros., Allentown (Pa.) department store, will test the legality of the so-called "invoice legend" (a manufacturer's statement on the invoice that the merchandise is to be sold under fair-trade terms).

Price controls don't seem to bother small businessmen. In an investigation conducted by the Syracuse (N. Y.) OPS office, only 61 out of 215 businesses visited in the upstate area were found to have filed their prices. The businesses included repair shops, dry cleaners, beauty shops, etc.

FINANCE



Expanding Fastest: The Chemical Trade

Fastest-growing segment of the U.S. economy in recent years has been the chemical industry. It has ballooned as no other trade has.

Two developments show the trend:

- By last week buying had pushed Standard & Poor's chemical stock index up to a level some 20% above its 1951 low—a performance few of the 86 other similar weekly indexes could match.

- Earnings after taxes of 19 representative chemical companies added up to some \$670-million in 1950, compared with but \$196-million in 1945 and \$210-million in the 1937 boom year.

- **Plan to Expand**—It looks as though the chemical group will keep leading the parade for some time to come, for further sharp expansion is in the offing. This week government experts estimated that the industry's plans to ex-

pand productive facilities for basic chemicals alone (charts, above) will call for some \$2-billion in the 1951-1953 period.

I. Out of Pocket

Nobody knows yet how all this expansion will be financed. Some companies will have to get help through stock and bond sales, as in the past. In the 1946-1950 period, for instance, Dow Chemical had to sell \$70-million of new long-term bonds to help finance new plant expenditures of \$225-million. And Monsanto had to get additional new money by selling \$30-million of new long-term bonds and \$40-million of new preferred stock.

- **Earnings, Depreciation**—But more than likely much of the expenditure will be handled, as in the past, through

the use of depreciation funds and retained earnings. What's more, such funds will be able to swing a tremendous amount of further expansion for the trade's leading units.

Retained earnings and depreciation accruals of E. I. du Pont de Nemours in the 1946-1950 period, for example, totaled up to almost \$475-million. They were as high as \$127-million in the case of Allied Chemical & Dye Corp. And neither of those trade leaders, despite all the money they've spent since VJ-Day in sharp expansion, has yet had to borrow "outside" money.

II. Outside Help

But some other companies just as well fixed haven't been able to handle their expansion without enlisting some aid. Take Union Carbide & Carbon

An Important Message on CMP

It has come to our attention that some steel consumers, particularly those concerned with "B" products, have been requesting allotments from their steel suppliers or passing on to them their allotment authorizations. This is contrary to CMP regulations, and seriously delays the entire allotment procedure for you.

Therefore, in an effort to help clarify this situation, we have briefly indicated below the general procedure which should be followed in securing an allotment.

► We would like to emphasize that steel warehouse distributors are not involved with the handling or issuance of allotments. When placing an order with your steel supplier, simply show your allotment number and the quarter for which the allotment is valid (Example: K-2-4Q51). Orders must also be properly certified under CMP regulations.

The General Requirements For Obtaining An Allotment

CLASS "A" PRODUCERS

1. If you are a producer of a class "A" product, you will get your allotments for controlled materials from the claimant agency (governmental), prime consumer (seller to claimant agency), or secondary consumer (seller to prime consumer) to whom you sell your product. IN EACH CASE, GO DIRECTLY TO YOUR OWN CUSTOMER FOR AN ALLOTMENT.

2. Your allotment application (Form CMP-4A) must include the amounts of controlled materials needed by your sub-contractors as well as by you.

3. You need not apply for controlled materials used for class "B" products to be incorporated in your class "A" product, since producers of class "B" products will receive their allotments direct from the NPA.

CLASS "B" PRODUCERS

1. If you are a producer of a class "B" product your application for controlled materials on Form CMP-4B must be sent to the proper industry division of NPA. You cannot obtain an allotment from any other source.

2. Your application Form CMP-4B must show all the controlled materials you need, as well as controlled materials needed by your sub-contractors producing class "A" products to be incorporated in your class "B" product.

UNITED STATES STEEL SUPPLY COMPANY

Warehouses Coast to Coast



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UNITED STATES STEEL

Corp.—second-largest U.S. chemical firm. Its retained earnings and depreciation accruals in the five years through 1946 totaled around \$350-million. Yet Union Carbide had to borrow \$150-million of "new money" direct from a life insurance company group.

• **Same Pattern**—You can look for this same pattern to prevail in the new wave of expansion. Once again, some companies will be able to pay their expansion expenditures out of their own pockets, others won't.

Dow, for example, has just arranged for a \$50-million, two-year revolving bank credit and the sale of \$60-million (plus possibly \$30-million more) of long-term 3½% notes to two life insurance companies. Monsanto will sell up to \$66-million of new 50-year 3½% income debentures direct to another group of investing institutions.

III. Fast Amortization

The chemical trade's need for so much new permanent or temporary capital isn't surprising. It usually happens to growth industries.

And right now there's a tremendous unsatisfied demand for critical chemicals. So it's believed that just about all the facilities covered to date by requests for fast tax writeoff privileges will be constructed.

Many companies are also expected, for the same reason, to go ahead with additional expansions for which fast writeoffs will never be requested. Thus Washington experts are pretty sure that before 1953 finally rolls around they will have to revise today's \$2-billion estimate sharply upward.

• **Approved**—To date government officials have approved fast tax writeoffs for some \$525-million of facilities involving more than 150 plants. Included in that total is a certificate of necessity issued this week covering a \$78.5-million new plant Union Carbide & Carbon Corp. plans to build at Marietta, Ohio, for the manufacture of ferroalloys and calcium carbide. That's the largest grant of this kind to the chemical industry in some time. Under it Union Carbide will be permitted to write off 65% of the costs involved in five years instead of over the customary 20- to 25-year period.

• **Turned Down**—Some applications have been rejected for one reason or another. However, many of the plants involved, the government experts believe, will be erected anyway. And they expect to see a lot of new facilities built about which they know nothing.

IV. Shortages and Future

Most of the current push for more basic chemicals stems from the mobilization program. The military needs huge



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quantities of everything from explosives to jet and rocket fuels. And expansion of major industries that support mobilization creates tremendous demands.

• **Rate High**—That gives chemicals expansion a high standing with the government agencies allotting raw materials. Generally, a chemicals plant with a certificate for fast amortization is virtually assured a supply of critically short structural steel when it needs it.

That doesn't mean the industry won't be plagued with other materials shortages. It has already been hurt by a lack of nickel. And on its doorstep is the developing tight supply of sulfur.

• **Sulfur Critical**—Neither the government nor industry sees much to cheer about in the sulfur picture. The most optimistic sources believe we'll get something less than 1-million additional tons of sulfur by 1953. That would still be nearly 300,000 tons short of estimated demand. And more hard-headed estimates put optimum new production at about 600,000 tons by 1953.

• **Running Behind**—Nitrogen supply and demand also appear headed toward imbalance, although not nearly so seriously as sulfur. Fertilizers still rate a large share of the supply under mobilization.

Also running behind estimated demand are known plans for the production of additional phenol, synthetic ethyl alcohol, and several other items critically needed for defense.

Treasury's Bills Lure Industrialists

A big change in the type of investors who buy its bills has made it possible for the Treasury to carry on deficit financing without much inflationary effect.

• **Week In, Week Out**—Treasury bills, which usually mature in 91 days, are the shortest form of government securities. An issue of bills matures every week; and every week, usually, the Treasury calls for bids on a new issue to refund it.

Since the beginning of July, the Treasury has sold each week \$200-million more bills than were maturing. It has been borrowing this new money to offset its July deficit of over \$1.7-billion, which it expects will swell to \$3.5-billion in the July-September quarter.

• **Banks Aren't Important**—Ordinarily, this type of borrowing would be inflationary, because banks are traditionally the major buyers of Treasury bills. When the government sells securities to banks, that creates new deposits in the Treasury's accounts. Ultimately, the Treasury spends this money and

thus increases the supply of money.

But, according to the Federal Reserve Bank of New York, banks aren't important any more in the bill market. The Federal Reserve last week that, in mid-July, banks held only 20% of the \$14-billion of bills then outstanding. The other 80% were mostly held by corporations.

• **Attracted by Interest**—The noticeable change has come about since early 1947, when nonbank investors owned only 4% of the bills outstanding. Since then, bills have become very popular with corporate treasurers as a way to hold tax reserves and other temporary funds. The change has been stimulated by the steady climb in the rate of interest paid on bills. The old fixed rate of 0.375% was abandoned in mid-1947. The "bill rate" now is about 1.65%.

Share the Risk

Taxpayers would bear the burden under the proposed war-risk insurance plan; and the government would handle claims.

The Administration's plan for war-risk insurance, introduced in the Senate a month ago, has the insurance industry at sixes and sevens. It can't decide whether to support or oppose the bill.

War-risk insurance, which provides protection for person and property against war's havoc, isn't really insurance at all. In order to set insurance rates, you need enough data to make a fairly accurate estimate of what future losses will be. But nobody can figure, even approximately, what damage the U. S. would suffer if attacked.

• **Previous Experience**—In World War II, protection against war damage was considered a matter of individual responsibility. People who wanted war-risk insurance on their property bought it from the government's War Damage Corp. through the insurance companies and their agents at rates set by guess work. The companies got 3½% of the premium to meet overhead costs; agents got a 5% commission.

As it happened, there was very little war damage. In the last part of the war, WDC extended the coverage for free.

• **Budget's Plan**—This spring a subcommittee of the Senate Banking & Currency Committee held hearings on several war-risk bills that, in essence, would have set up the World War II system again. The Bureau of the Budget told legislators that, because of the destructive possibilities of the atomic bomb, these bills were inad-

quate. Budget later submitted its own idea of what a war-risk bill should be. The subcommittee, headed by Sen. Joseph A. Frear, Jr. (D. Del.), liked the bill, had it introduced in the Senate.

The bill has an entirely new pitch. It abandons the conventional insurance principle and the idea of individual responsibility. Under it, war damage to property would be a general burden to be borne by all taxpayers.

Budget argues that this approach is best for insurance companies. It figures that the insurance industry should be left free to handle its normal claims, leaving war claims to the government.

• **How It Would Work**—Budget's bill is divided into three parts:

- It gives the President broad standby powers, after an attack, to get industrial production and community life going again.

- It authorizes financial aid to people thrown out of work, to the injured, and to dependents of those killed in an attack. To keep insurance companies, state workmen's compensation funds, and pension funds out of bankruptcy, the President could put a moratorium on claims arising out of an attack, until the entire damage could be assessed.

- It sets up a War Damage Administration to handle property claims—which wouldn't be paid until hostilities were over.

The bill authorizes \$20-billion for property damage. That way, property owners could expect pretty generous indemnities unless atomic attacks are widespread. At the same time, the government isn't going too far out on a limb: Budget figures that \$20-billion is 3% or 4% of the value of all private U. S. property. The bill also provides \$2-billion to help state and local governments rebuild facilities.

To avoid a flood of small claims, the first \$100 of damage would not be covered. And the government wouldn't pay more than 90% of any approved claims. Further, all approved claims below \$5,000, and the first \$5,000 of larger claims, would be paid first. The rest would get a prorated share if there wasn't enough money left to pay them in full.

• **No Comment**—The Frear subcommittee is trying to get the insurance industry's reaction to the bill—but so far it hasn't had much luck.

Some insurance men undoubtedly will go along with the U. S. Chamber of Commerce, which has denounced the bill as setting up "a new system of money handouts, which would be difficult to administer and almost impossible to terminate." The chamber feels that any system of war-risk insurance should be handled through the experienced insurance companies. It also

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Kentanium blades and parts in a gas turbine, when adopted, can greatly increase the fuel efficiency of a turbo-jet engine. Kentanium, a sister metal to Kennametal, uses neither tungsten nor cobalt.

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attacks the idea of calling a moratorium.

Others in the industry feel that something will have to be done to save life insurance companies from possible bankruptcy in the event of a large-scale atomic attack.

The Budget bill doesn't have much chance of getting through Congress this year. Congress is too jammed. But the subcommittee hopes to have hearings on it before long.

FINANCE BRIEFS

Bank loans for the first half of 1951 gained more than in any other similar period, though they slowed down in the second quarter. The Federal Reserve Board reports that loans of member banks climbed \$2.2-billion in the first six months, though only \$557-million of this gain came in April-June.

Class I railroads earned \$50-million in June, compared to \$75-million a year ago, says the Assn. of American Railroads. First-half earnings were up, however: \$250-million compared with \$209-million in 1950.

Another split: Directors of Firestone Tire & Rubber Co. have asked stockholders to vote Sept. 8 on a two-for-one split of their common shares.

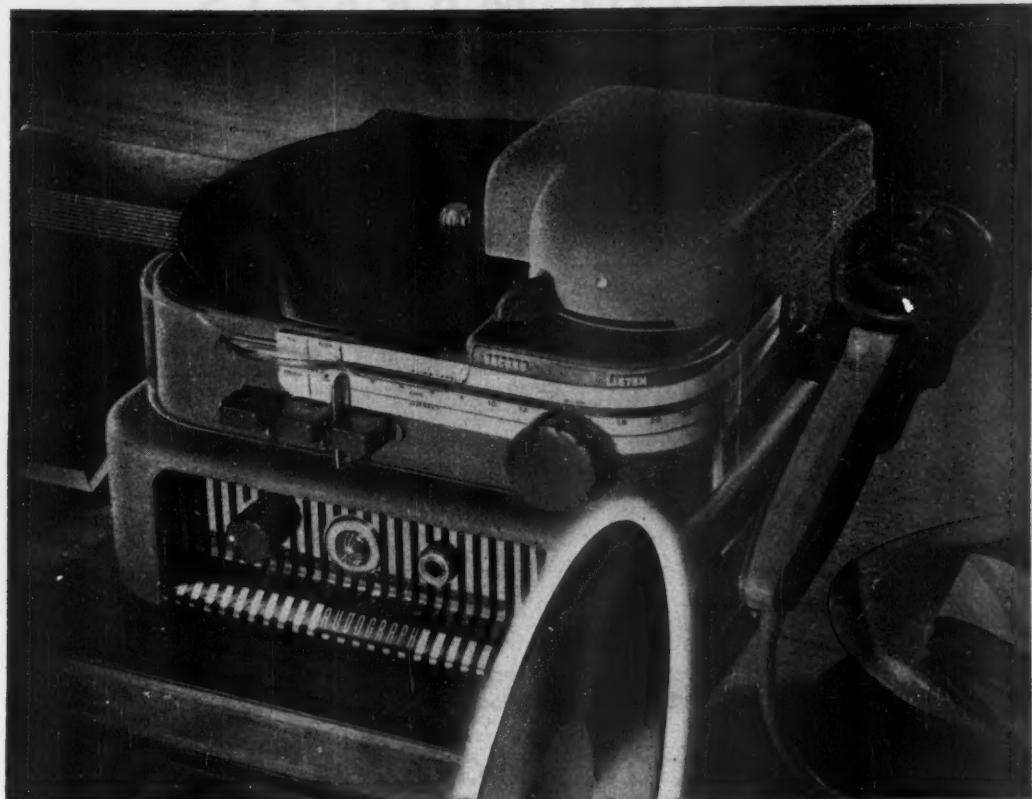
Free insurance is illegal, state insurance commissioner Frank J. Viehmann of Indiana told filling station dealers. Dealers have been giving away accident policies, good for 24 hours, with every \$2 purchase of gas.

RFC is asking for bids on blocks of stock it acquired through loans to Seaboard Air Line RR. and Foote Bros. Gear & Machine Corp.

Accidents cost the nation at least \$7.3-billion in 1950, according to the National Safety Council.

Spencer Chemical Co. will ask stockholders to approve an issue of 125,000 shares of \$50 par convertible preferred. The stock will be offered to common shareholders. Proceeds, plus about \$5-million from a bond issue, will be used to build an anhydrous ammonia plant near Vicksburg, Miss.

Stock buyers protest last week's boost in odd-lot brokers commissions on stock selling at \$40 or more (BW—Aug. 4 '51, p102). The Assn. of Customers Brokers says the increase will cut down odd-lot trading in the better stocks.



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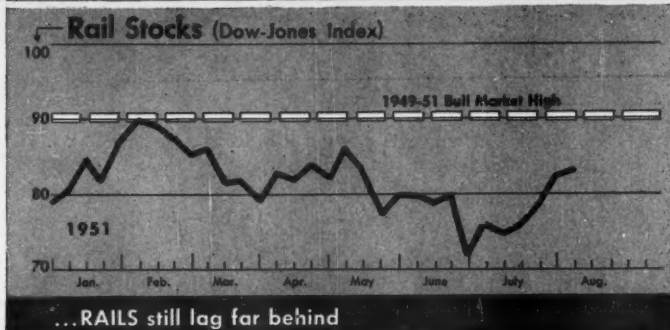
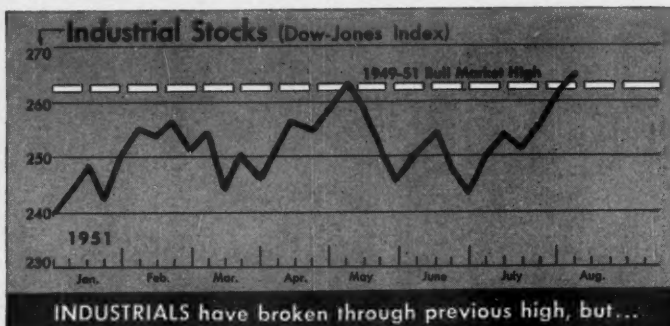
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THE MARKETS



How Solid Is the Rally?

Industrials are again above the postwar high, but the public isn't having any this time. Traders wonder if rails will confirm industrials; if not, industrials may break sharply.

Although the Dow-Jones industrial average reached a new postwar high this week, the bellowing of the bulls in Wall Street has an uncertain sound. For there are plenty of signs of weakness about this latest rally.

For one thing, the "public" is not in on this move. Volume of shares traded on the Big Board has been below 2-million on most days. And low-priced stocks, the "public's" particular favorites, have been dragging in recent weeks (BW-Aug. 4 '51, p104).

Furthermore, there has been no followthrough by the industrials since they reached their new high. At mid-week the industrial average had declined a bit, though it was still above its May high.

• **Rails Lag**—Another thing that a lot of analysts don't like about the market is that the Dow-Jones rail average is still way below its postwar high of 90.08, which it reached early last February (chart)

Whether they are Dow theorists or

not, these observers agree that it will be a bad sign if the rails fail to confirm the breakthrough of the industrials. If the rails don't follow the industrials, some observers are expecting a sharp break in the industrial average.

• **May Get Boost**—Of course, there's a chance the rails may confirm the industrials before long. Wall Streeters had been hoping that the Interstate Commerce Commission would announce a fairly favorable decision on the railroads' request for a 15% freight increase. The decision came on Wednesday. The eastern roads got a 9% boost, western and southern roads 6%.

This could create a lot of interest in rail stocks. But they'll still have hard going. For three months in the early part of this year, the rail average wandered between 80 and 90. A good many people who bought rails then may want to sell them as soon as they can get out without a loss.

• **Confined**—By and large, the rally in the stock market has been confined

so far to a few selected groups like chemicals, oils, tire and rubber shares, and ethical drugs (page 131). Furthermore, since a lot of the buying has been for long-term investment, markets in these favorite stocks have got a bit thin.

Not everyone in Wall Street is pes-

simistic, naturally. If everybody agreed, there would be no market. You can find analysts who think another burst of inflation will be along fairly soon.

These analysts believe further that this is what is tending to push stocks upward.

"Korean Market" Leadership Shifts

Standard & Poor's Weekly Indexes (1935-39 = 100)

| Stock Index | 1950 Phase | | 1951 Phase | | Total "Korean Market" Gain | |
|---------------------------------|------------------|---------------|---------------|--------------|----------------------------|-------------|
| | Pre-Korean Level | 1950 Year-end | 1950 Year-end | Recent Level | Gain | Gain |
| Tires, rubber goods..... | 235.9 | 292.9 | 24.2% | 292.9 | *416.5 | 52.2% |
| "War" stocks..... | 137.9 | 169.8 | 23.1 | 169.8 | *243.1 | 53.2 |
| Fertilizer..... | 260.9 | 337.1 | 29.2 | 337.1 | 441.0 | 39.8 |
| Oil..... | 193.7 | 230.4 | 18.9 | 230.4 | *294.9 | 33.3 |
| Rayon..... | 406.7 | 539.6 | 32.7 | 539.6 | *609.1 | 17.1 |
| Paper..... | 415.7 | 568.0 | 36.6 | 568.0 | 601.0 | 8.0 |
| Mining, smelting..... | 82.5 | 108.0 | 30.9 | 108.0 | 117.7 | 11.8 |
| Lead, zinc..... | 89.9 | 128.9 | 43.4 | 128.9 | 128.1 | -0.9 |
| Ethical drugs..... | 194.3 | 165.4 | -14.9 | 165.4 | *274.1 | 56.0 |
| Air transport..... | 250.1 | 339.4 | 35.7 | 339.4 | 352.4 | 5.2 |
| Bituminous coal..... | 301.3 | 404.3 | 34.2 | 404.3 | 418.8 | 4.8 |
| Woolen goods..... | 100.1 | 156.6 | 56.4 | 156.6 | 138.0 | -18.5 |
| Railroads..... | 108.6 | 144.5 | 33.1 | 144.5 | 146.7 | 2.0 |
| Copper..... | 127.2 | 166.9 | 31.2 | 166.9 | 170.8 | 3.1 |
| Chemicals..... | 191.9 | 209.9 | 9.4 | 209.9 | *251.1 | 21.4 |
| Distillers..... | 357.3 | 485.8 | 36.0 | 485.8 | 462.0 | -5.7 |
| Metal fabricating..... | 122.1 | 146.1 | 19.7 | 146.1 | *158.4 | 10.0 |
| Agricultural machinery..... | 136.5 | 160.3 | 17.4 | 160.3 | 174.6 | 10.5 |
| Machinery..... | 123.7 | 153.4 | 24.0 | 153.4 | 157.5 | 3.3 |
| Capital goods stocks..... | 150.5 | 168.6 | 12.0 | 168.6 | 188.4 | 13.2 |
| Railroad equipment..... | 81.1 | 104.3 | 28.6 | 104.3 | 101.5 | -3.4 |
| Glass containers..... | 113.6 | 129.2 | 13.7 | 129.2 | 140.2 | 9.7 |
| Aircraft manufacturing..... | 137.8 | 179.7 | 30.4 | 179.7 | 169.4 | -7.5 |
| All industrials..... | 159.5 | 175.1 | 9.8 | 175.1 | *195.9 | 13.0 |
| Leather..... | 156.6 | 192.8 | 23.1 | 192.8 | 192.0 | -0.5 |
| Sugar..... | 103.1 | 120.4 | 16.8 | 120.4 | 124.3 | 3.8 |
| COMPOSITE INDEX..... | 149.4 | 162.0 | 8.4 | 162.0 | *179.4 | 11.7 |
| Shipbuilding..... | 177.7 | 218.2 | 22.8 | 218.2 | 213.5 | -2.7 |
| Steel..... | 173.0 | 209.9 | 21.3 | 209.9 | 207.6 | -1.3 |
| Cotton goods..... | 244.2 | 328.8 | 34.6 | 328.8 | 292.8 | -14.7 |
| Proprietaries, cosmetics..... | 134.1 | 135.5 | 1.0 | 135.5 | *159.1 | 17.6 |
| Low price commons..... | 161.3 | 198.3 | 22.9 | 198.3 | 190.0 | -5.2 |
| Department stores..... | 228.1 | 264.4 | 15.9 | 264.4 | 267.8 | 1.5 |
| Mail order, general chains..... | 209.7 | 233.2 | 11.2 | 233.2 | 242.6 | 4.5 |
| Building materials..... | 140.6 | 135.0 | -4.0 | 135.0 | *161.3 | 18.7 |
| Shipping..... | 391.9 | 415.9 | 6.1 | 415.9 | 444.7 | 7.4 |
| Electrical equipment..... | 126.9 | 126.0 | -0.7 | 126.0 | 143.0 | 13.4 |
| Motion pictures..... | 140.5 | 145.7 | 3.7 | 145.7 | 157.3 | 8.3 |
| Office, business equipment..... | 207.1 | 202.8 | -2.1 | 202.8 | *230.9 | 9.4 |
| High grade commons..... | 136.8 | 138.1 | 0.9 | 138.1 | *147.7 | 7.1 |
| "Peace" stocks..... | 165.4 | 164.5 | -0.5 | 164.5 | 177.9 | 8.1 |
| Auto parts, accessories..... | 139.3 | 139.6 | 0.2 | 139.6 | 146.8 | 5.6 |
| Consumers' goods stocks..... | 156.6 | 160.2 | 2.3 | 160.2 | 165.6 | 3.4 |
| Natural gas..... | 201.7 | 185.5 | -8.0 | 185.5 | 212.1 | 13.2 |
| Foods..... | 146.2 | 148.5 | 1.6 | 148.5 | 148.7 | 0.1 |
| Printing, publishing..... | 109.6 | 119.8 | 9.3 | 119.8 | 110.4 | -8.6 |
| Utilities..... | 112.5 | 106.2 | -5.6 | 106.2 | *113.2 | 6.2 |
| Metal containers..... | 89.3 | 74.2 | -16.9 | 74.2 | 89.0 | 16.6 |
| Food chains..... | 236.2 | 241.4 | 2.2 | 241.4 | 232.7 | -3.7 |
| Shoes..... | 115.4 | 116.4 | 0.9 | 116.4 | 112.6 | -3.3 |
| Television, electronics..... | 241.3 | 199.1 | -17.5 | 199.1 | 233.6 | 14.3 |
| Automobile..... | 186.7 | 181.3 | -2.9 | 181.3 | 180.6 | -0.4 |
| 5¢, 10¢, \$1 chains..... | 133.6 | 125.0 | -6.4 | 125.0 | 125.2 | 0.1 |
| Finance companies..... | 129.5 | 97.3 | -24.9 | 97.3 | *120.6 | 18.0 |
| Carpets, rugs..... | 146.9 | 134.4 | -7.1 | 134.4 | 133.3 | -2.2 |
| Tobacco..... | 85.7 | 80.3 | -6.3 | 80.3 | 75.7 | -5.4 |
| Confectionery..... | 135.1 | 122.7 | -9.2 | 122.7 | 119.2 | -2.6 |
| Gold mining (U. S.)..... | 71.3 | 54.7 | -23.3 | 54.7 | 58.8 | 5.8 |
| Soft drinks..... | 130.3 | 106.5 | -18.3 | 106.5 | 97.9 | -6.6 |

NB All gains figured on basis of "Pre-Korean level".

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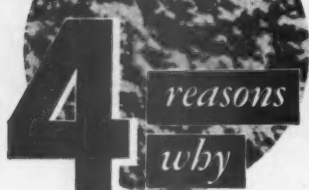
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DEFENSE BUSINESS

What's Wrong With CMP?

NPA will audit industry records in attempt to ferret out reason materials supplies are not in line with allotments. Officials suspect violation of rules is the answer.

If businessmen will only "play the game according to Hoyle," the Controlled Materials Plan will be working smoothly within 60 days. CMP's top managers think that's true, even about industry's No. 1 squawk over controls—that mills won't accept CMP-approved orders. Actually, a mill has to accept CMP-approved orders until its order board is filled; after that, it must reject any additions.

Right now the officials who run CMP are putting compliance men in the field for a quick audit of industry records to see to it that the rules are abided by. They believe the audit will do a double job: (1) disclose important infractions of CMP regulations, and (2) restore cashier-check status to allotment paper, which at the moment seems worthless.

There is nothing random about these compliance audits, though the official announcement indicated there was. They are being made on the biggest 1,000 users of steel, copper, and aluminum—the giants that consume 80% of the controlled materials.

CMP officials don't think the big companies are the only offenders. The big ones are being checked first simply because they are most important in terms of metal. And it's the seeming disappearance of metal under CMP operations that has thrown a lot of industries onto a lean-ribs diet when they had expected to get some fat.

• **No Match**—In theory, CMP allots only as much steel, copper, and aluminum as is available. So technically there should be no jamup in filling all approved production schedules.

A check by BUSINESS WEEK correspondents in important industrial centers, however, shows the theory simply isn't working out. Business is having serious trouble placing approved orders. At least one key mobilization agency—Defense Electric Power Administration—is so concerned that it is making its own study of orders rejected by mills.

The most obvious explanation for the traffic jam at producers' orders boards is that CMP issued allotments for a lot more material than the mills can produce. This is the accusation of most CMP critics in Washington and in industry.

For a time, some top CMP analysts wondered whether this explanation might be correct—at least for copper, and perhaps for steel (BW—Jul. 14 '51, p120). Now they have a new batch of unreleased figures that show, they say, that allotments as issued can all be cashed for good, sound steel, copper, and aluminum. What really is wrong, they are convinced, is that widespread violations of key CMP rules temporarily are inflating orders on producers' books.

• **Behind the Audit**—It's this inflation that they think compliance auditors will puncture. Here are the infractions auditors are going to look for, in particular:

• Failure of users of controlled materials to cancel orders placed prior to CMP, but not approved under CMP allotments.

• Multiple ordering—placing an approved CMP order in more than one mill.

• Bunching approved orders for a whole quarter in a single month, violating the regulation that not more than 35% of a quarter's material should be ordered for delivery in a single month. CMP brass thinks this is one of the big reasons why the September order boards of many mills were filled in a few weeks' time, leaving latecomers with paper that they have not been able to trade for metal.

One top CMP boss thinks the audit will turn up so much free space on order boards that the confusion will be over in 60 days.

CMP is so sure it is right that it probably won't do a lot of good—now at least—to complain to Washington that you can't get a mill to accept your approved order. Likely as not, CMP will simply tell you to keep on trying—that the mill capacity is there and it's up to you to find it.

• **Imbalance Blamed**—The situation is different with complaint No. 2—that allotments of steel, copper, and aluminum don't balance.

One maker of heavy industrial equipment has a copper allotment sufficient for 488 units, aluminum for 473, and alloy steel for only 405. Another got enough steel to fill his entire authorized production schedule, but enough brass to make only a third of it. Several

From The New York Times
SEPTEMBER 1950

Again, as before Pearl Harbor, Reynolds was first in publicly proclaiming with this advertisement: "America needs more aluminum!"

AMERICA NEEDS MORE ALUMINUM

As in 1940, the need for aluminum has doubled.

The first phase of aluminum... has been in work for...

It is the first time since the war that...

Now Reynolds reports the coming in 1950...

In 1940, U.S. Reynolds challenged the world...

...and today...

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From The New York Times
OCTOBER 1950

National Security Resources Board and aluminum producers meet to plan expansion.

...major producers of aluminum met with Mr. Symington today to discuss plans for expanding production

From The New York Times
NOVEMBER 1950

First expansion agreement announced... Reynolds to add 100,000 tons of new capacity.

Reynolds to Expand Aluminum Production 100,000 Tons Under Agreement With G.S.A.

WASHINGTON, Nov. 23 (AP) — The Government today announced plans to expand the nation's aluminum input production by 100,000 tons a year.

General Services Administration said it has entered into an agreement with Reynolds Metals Company to build a new 75,000-ton plant to be ready for production...

The agreement was negotiated for the Government by James L. Jones, G. S. A. Administrator, and by James H. Jones, Reynolds Metals Company President.

JUNE 1951

REYNOLDS IS FIRST WITH NEW ALUMINUM CAPACITY IN PRODUCTION

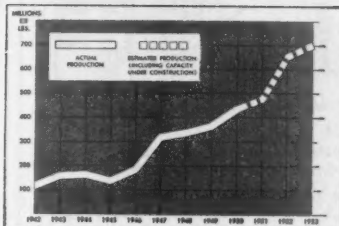
Reynolds is proud to announce the first new aluminum capacity actually completed and in production under the current expansion program... 50,000,000 lbs. a year additional now pouring from the new facilities at Jones Mills, Arkansas, and Troutdale, Oregon.

This first increase goes only a small way toward the rapid increase in demand. Military uses multiply as dramatically as civilian uses... planes, rocket tubes, pontoon bridges, PT boats, thousands of vital parts for tanks and trucks, miles of foil to protect food and medical supplies. But more aluminum is on the way. Construction proceeds apace on Reynolds

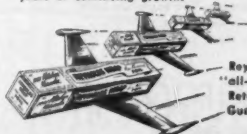
great new plant in San Patricio County, near Corpus Christi, Texas... to produce 150,000,000 lbs. a year, privately financed. And further new capacity is being built by other aluminum companies.

This is a symbol of action in a vital U. S. program designed to meet civilian as well as military needs. We all face the double job of fighting shortages and inflation while we fight aggression. Reynolds will continue to work at that double job full time, full speed.

Reynolds Metals Company, General Sales Office, Louisville 1, Ky. Executive Offices, Richmond 19, Va.



The expanding primary aluminum production of Reynolds Metals Company—a historic chapter in the company's 32 years of continuing growth.



Reynolds Wrap is "all-out" for defense Return Flight Guaranteed



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in this debt-free state where old-fashioned Americanism is basic!



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... a consensus resulting from current industrial surveys.

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DETACHABLE, REUSABLE FITTINGS
SELF-SEALING COUPLINGS
"BREAKAWAY" • HYDRAUSCOPE

AEROQUIP CORPORATION, JACKSON, MICH.

companies reported copper running 25% under comparable allotments for steel and aluminum.

This "leaves a lot of steel lying around," one manufacturer pointed out. Under CMP rules, you are supposed to report overallocments so unused material won't stay idle. If the allotments are seriously out of line—somewhere over 10% or 15%—you can ask for more of the material you are light on, with some chance of getting it. In cases where the lack of balance is a narrow one, CMP probably won't do any adjusting upward for you.

• **Whipping Boy**—A certain amount of confusion, centering around both complaints No. 1 and No. 2, was expected

by the CMP staff. Under the plan, one man's allotment is as good as another's, which means if a new customer gets to a mill first, he'll be on the order board first. That may crowd an old customer off.

In addition, CMP staffers suspect there may be some psychological explanations for the outbreak of criticism. CMP makes a convenient alibi to the boss if materials receipts aren't jibing, no matter what the cause. And they suspect CMP is being blamed for some summer layoffs that would be taken as normal any other year. They think time will take care of criticism of this sort—another reason for their confidence that 60 days will see CMP over the hump.

Strategic Stockpile Gets One Boss

Jess Larson will head new Defense Materials Procurement Agency to plug drain on metals, speed minerals expansion.

Instead of building up the defense stockpile for a future, all-out war, the U.S. has been diverting critical materials from it in order to maintain industrial production at current rates. That's the big reason why Jess Larson will have a new job when he gets back from Europe.

The Oklahoma trouble-shooter will step out of his snug job as General Services Administration boss into what may turn out to be as hot a spot as any in the mobilization setup—head of the new Defense Materials Procurement Agency.

• **Lost Ground**—The tipoff of trouble ahead came in the new stockpile report to Congress. It showed a dollar gain toward the over-all objective: We are \$700-million nearer the goal now than six months ago. But in terms of really scarce and critical materials, we have lost ground.

How much ground is secret, of course. But you can get some idea by looking at what's happened to copper. The trend began earlier in the year when the amount of the metal taken for stockpile was cut in half—from 26,000 tons to 13,000 tons per month. Next came instructions to suppliers to suspend shipments in the third quarter. Now processors and fabricators are saying that an outright draft on the stockpile for 100,000 tons is necessary to restore inventories and keep industry going at the current rate. Trade guesses are that the government has something over 500,000 tons.

The stockpile report cites no specific figures. It does say that some materials have been diverted to relieve production bottlenecks and that the rate of delivery of others has been cut down.

Tungsten is probably one of those

affected. The stockpile watch-dogs—Sen. Lyndon Johnson's preparedness subcommittee—calls the tungsten situation "desperate." The take of tin was cut a third in June, and previous goals had not been reached. Acquisition of chromite is lagging despite big imports. Nickel, cobalt, and molybdenum have been under terrific pressure; supplies may have dwindled.

• **Central Authority**—Larson's job will be to centralize authority over stockpiling and minerals expansion; up to now it has been scattered among a fistful of agencies, including Interior Dept., Defense Minerals Administration, DPA, NPA, OPS, RFC, and ECA. Chief mobilizer Charles E. Wilson has actually been calling the turn on stockpiling and expansion policy, but indirectly through DPA. Now Larson will centralize that control as part of the Wilson team.

Larson undoubtedly will have to answer to Congress for the present stockpile policy. In addition, he inherits the politically hot minerals expansion program, which has been stalled in the Defense Minerals Administration. Lack of centralized authority has been DMA's trouble. Mining-state politicians, who have demanded freer use of public funds to expand domestic output, will welcome Larson's job as a clear target they can shoot at.

• **Central Enough?**—It may turn out that the centralization of authority under Larson is still insufficient to straighten out either stockpile acquisition or expansion of production. Wilson's DPA retains top authority over how much material industry needs and how much government money will go into expansion. RFC still has a big voice in tin acquisition, and ECA still runs Marshall Plan projects.

**Pardon My
Ignorance**
by Pinet



*I thought **STABILIZED ZIRCONIA** was a run-down race horse
... until I got the facts from Norton*

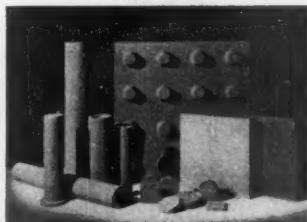
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Firms with high-temperature problems complicated by chemical, electrical, and physical variables look first to Norton, pioneers for 40 years in the engineering of special refractories. You'll understand why when you read Norton Bulletin 151. For your free copy, contact your nearby Norton representative, or write to NORTON COMPANY, New Bond Street, Worcester 6, Mass.



IN GAS GENERATORS, walls of Norton CRYSTOLON® silicon carbide brick outlast fire clay brick walls 4 to 1. They're so hard and dense that slag can't penetrate. The result? Down-time and cleaning time are reduced; maximum gas production is maintained.



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CHECKLIST: Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

Full texts of the materials orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Sole leather: Revokes order restricting sole-leather cutting, due to a rescheduling of military procurement and an increase in the supply of cow hides and skins. M-34 Revocation (July 31).

CMP: Amends Reg. 1 to make clear that a mill may not accept an authorized controlled material order if it cannot be filled during the calendar quarter for which it is valid, unless it is revalidated for a subsequent quarter. CMP Reg. 1, Amend. 2 (Aug. 1).

Consumer durable goods: Permits greater flexibility in use of iron and steel quotas, but makes no change in total amount of iron or steel permitted users during the third quarter. M-47A as amended (Aug. 2).

Hides: Extends for two months the regulation on processing certain hides and skins. Increases amounts permitted to be processed to 600% of the 1950 base period for the five-month period, May 1-Sept. 30, 1951. M-62, Amend. 2 (Aug. 1).

Softwood plywood: Increases the amount of softwood plywood that manufacturers must set aside each month. M-63 as amended (Aug. 3).

Printing plates: Rules that these shall be classified as operating supplies by the owner of the plates (whether he is an advertiser, advertising agency, publisher, or printer) and that he may use a DO-MRO rating to obtain them. CMP Reg. 5, Dir. 1 (Aug. 3).

Mining industry MRO: Permits mining industry to use allotment symbol H-6 and the priority rating DO-H-6 to obtain limited quantities of controlled materials, as well as products and materials other than controlled materials for MRO use and minor capital additions. M-78 (Aug. 6).

Laboratory priorities aid: Liberalizes priorities assistance to scientific and technical laboratories by permitting institutions, companies, and government agencies operating more than one laboratory to treat each lab separately in

applying for priorities aid. M-71 as amended (Aug. 6).

Steel: Requires steel mills to supply distributors and converters with certain minimum amounts of materials. Dir. 2 to M-1 and Dir. 2 to M-6 (Aug. 2). Establishes increased percentages of iron and steel products to be set aside by mills as a reserve to fill rated orders. M-1, Amend. 1 (Aug. 2).

Construction: Revokes basic construction order, replacing it with new regulations that tighten controls over larger building projects; removes necessity of applications to NPA for permission to begin construction or get allotments of materials for building or projects using small amounts of steel, copper, and aluminum. M-4A; M-4 Revoked; Del. 14 as amended; Del. 7 Revoked; CMP Reg. 6, Dir. 1; CMP Reg. 6 as amended; M-74 as amended (Aug. 3).

Pricing Orders

Pork loins: Sets dollars-and-cents ceilings on pork loins weighing 16 lb. or less. GCPR, SR 47 (effective July 31).

Canned fruits and berries: Permits price adjustments for changes in raw material costs, sugar costs, etc. for the canned fruit and berry industry. CPR 56 (effective July 31).

Antifreeze: Sets dollars-and-cents ceilings on three standard types of antifreeze applicable to retail sales and sales to retail dealers. CPR 57 (effective Aug. 6).

Scrap rubber: Sets dollars-and-cents ceilings on scrap tires, tire parts, and scrap tubes, and fixes ceilings on other kinds of scrap rubber for each seller on the basis of his selling price between Nov. 15 and Dec. 31, 1950. CPR (effective July 30).

Reclaimed rubber: Sets dollars-and-cents ceilings on 14 major grades of reclaimed rubber and provides means for pricing other grades. CPR 58 (effective Aug. 6).

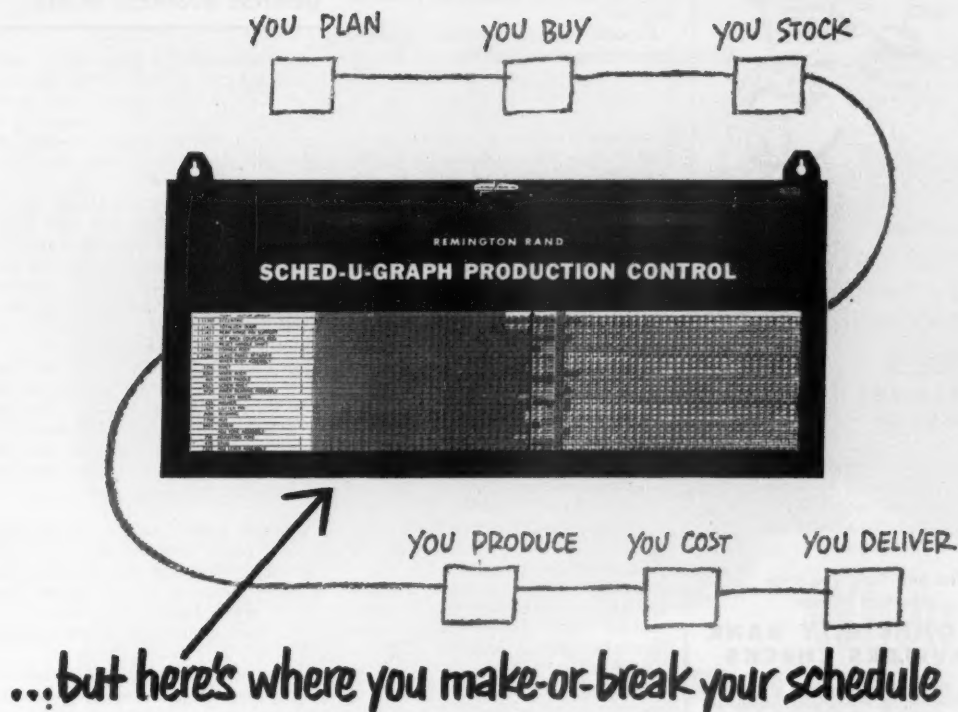
Zinc: Sets dollars-and-cents ceilings on remelt zinc. GCPR, SR 48 (effective Aug. 6).

Tires and tubes: Determines maximum price for private-brand tires and tubes by adding to the manufacturers' cost the percentage markup that he had on sales to a particular buyer during a 90-day accounting period between Jan. 1 and June 30, 1950. CPR 62 (effective Aug. 1).

Copper and brass mill scrap: Rolls back prices of all grades of copper alloy scrap and brass mill scrap containing tin. CPR 46, Amend. 1; CPR 47, Amend. 1 (effective Aug. 6).

Castings: New regulation covers sales by producers of metal castings. CPR 60 (effective Sept. 1).

Fat and oils: Places export sales of all fats and oils and their finished products under CPR 61 (export ceiling price reg-



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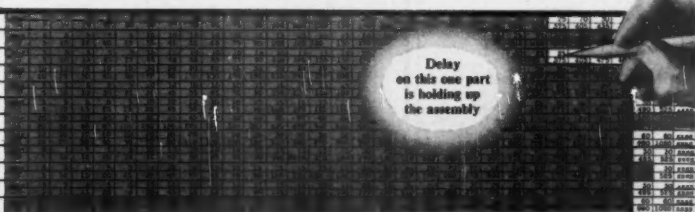
Sched-U-Graph helped plants do "the impossible" in World War II. It is helping them again today . . . on all types of production and machine load problems. We'll rush without obligation our 32-page Sched-U-Graph Handbook (KD 341) if you'll just phone or write: Room 1261, 315 Fourth Ave., N.Y. 10. **Remington Rand Inc.**

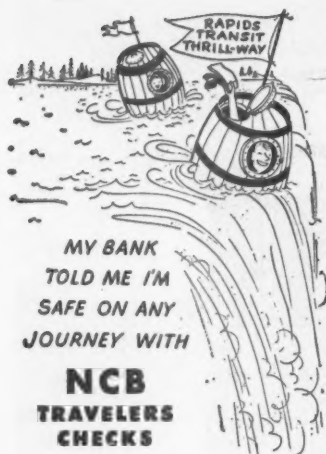
here's how Sched-U-Graph Production Control works

Top line on this Sched-U-Graph represents a pump assembly — each line below, one component part. On each line is recorded, in advance, each day's production quota and the total to date. The sliding bar signals show work actually completed. The black vertical line indicates

today's date, and shows how much work should be done. In this case, all components but one — the totalizer door — are on or ahead of schedule, but the whole assembly is delayed. You see the delinquent in a flash, and know exactly where corrective action is needed.

| PUMP—MOTOR DRIVEN | | |
|---------------------|------------------------|---|
| 1-11392 | ECCENTRIC | 1 |
| 1-11415 | TOTALIZER DOOR | 1 |
| 1-11413 | REAR HINGE PIN SUPPORT | 2 |
| 1-11421 | SET-BACK COUPLING ROD | 1 |
| 1-11422 | RESET HANDLE SHAFT | 1 |
| 1-24946 | CORNER POST | 4 |
| 1-25364 | GLASS PANEL RETAINER | 2 |
| MIXER BODY ASSEMBLY | | |
| 3356 | RIVET | 1 |
| 8264 | MIXER BODY | 1 |
| 865 | MIXER PADDLE | 1 |





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Atlas Corporation

33 Pine Street, New York 5, N.Y.

Dividend No. 39
on Common Stock

A regular quarterly dividend of 40¢ per share has been declared, payable September 21, 1951, to holders of record at the close of business on August 27, 1951 on the Common Stock of Atlas Corporation.

WALTER A. PETERSON, Treasurer
July 27, 1951.

ulation). CPR 6, Amend. 10 (effective Aug. 6).

Exports: Prevents American exporters from adding more than their pre-Korean percentage markups to domestic prices in selling abroad. CPR 61 (effective Aug. 6).

Imports: Provides an effective date of Sept. 1 for the regulation, with the option that a seller may make it effective at such earlier date as he files list of markups. CPR 31, Amend. 6 (effective July 31).

Lubricants and greases: New regulation covers lubricants, greases, and related products as a forerunner to dollars-and-cents ceilings to be fixed later. CPR 63 (effective Aug. 6).

Beef: Cancels schedule of wholesale beef ceiling prices that were to have gone into effect Aug. 1 in conformity with Congress ban on rollbacks for agricultural commodities. CPR 24, Amend. 4 (effective Aug. 1).

Canned salmon: Establishes new ceilings for canners by adding to the price of the bulk of the 1949 pack certain increased unit costs incurred since then. CPR (effective Aug. 8).

Custom plastics: Provides a pricing method for manufacturers of custom molded plastic products and custom fabricated plastic products. CPR 22, SR 14 (effective Aug. 25).

Canned meat: Revises method for calculating ceiling prices of sterile canned meat and dry sausage. CPR 22, SR 15 (effective Aug. 6).

Asphalt: New regulation covers sales of asphalt products at all levels of distribution. CPR 66 (effective Aug. 6).

Tire carcasses: Sets dollars-and-cents ceiling on passenger car tire carcasses. GCPR, SR 49 (effective Aug. 6).

Soft drinks: Amends regulation to apply to bottlers who sell through distributors as well as those who sell directly to retailers. GCPR, SR 43, Amend. 1 (effective Aug. 6).

Canned vegetables: Extends effective date of regulation to Aug. 20. CPR 55, Amend. 1 (effective Aug. 3).

Who's a Manufacturer?

When is a manufacturer a manufacturer? It depends on whose definition you take.

Funk & Wagnalls says he's "one who manufactures; a person engaged in manufacturing as a business" (New Standard Dictionary). Not according to the Office of Price Stabilization.

OPS eliminates the man who "rebuilds, reconditions, renovates, renews, or otherwise restores a used commodity." Unless he uses new supplies to make new commodities he's not a manufacturer.

Just what he is, OPS hasn't said yet. Which means some people don't know what orders they come under.

DEFENSE BUSINESS BRIEFS

Farm equipment makers, faced with materials cuts in the fourth quarter, told NPA their business is far from slumping. They said that demand still exceeds output, that they could sell more than they can make under CMP.

Some steel mills are still taking fourth-quarter orders for sheet and light plate, NPA told conveyor equipment makers. The industry's advisory committee had complained that steel mills were refusing CMP-approved orders, saying their capacity was booked.

Can manufacturers will get at least 1-million tons of steel per quarter for the year beginning Oct. 1. For the first three months, NPA will reserve an additional 100,000 tons, in case can makers need it. The industry asked for 1.2-million tons per quarter.

Tool-steel makers will get enough tungsten for their needs for the rest of this quarter, NPA told the industry. Cobalt is expected to get tighter, and NPA urged further reductions in its use. Vanadium is still in good supply.

Cadmium can be used again in bearings for automotive parts, and the percentage allowed in silver-brazing alloys was raised from 19% to 25%. NPA relaxed restrictions because inventories had been piling up.

Chemicals may be removed from all defense-rated orders, except those of the military and Atomic Energy Commission. NPA is working on it now.

Steel scrap: If steel makers can't locate enough to maintain production, the government will recruit a staff to take over the job. Manly Fleischmann, DPA chief, told the steel products advisory committee that he couldn't see any permanent solution to the scrap shortage in light of expanding steel capacity.

The Pictures—Cover by Dick Wolters. Acme—32 (lt.); The Bettmann Archive—34 (lt.); Louis de Rochemont—46, 47; Harris & Ewing—23; Hawaiian Airline—90; Int. News—22, 27, 28, 34 (rt.), 50; Bob Isear—24, 25; Victor Kayfetz Productions—146; Ralph Morgan—88; Pratt & Whitney Aircraft—58 (rt.); John A. Rodriguez—103; Charles Rotkin, PFI—52, 53; Charles J. Sullivan—58 (lt.); Vandamm—96 (top rt., bot.); Wide World—32 (rt.); Dick Wolters—70, 71, 79, 80, 82, 96 (top lt.), 97.



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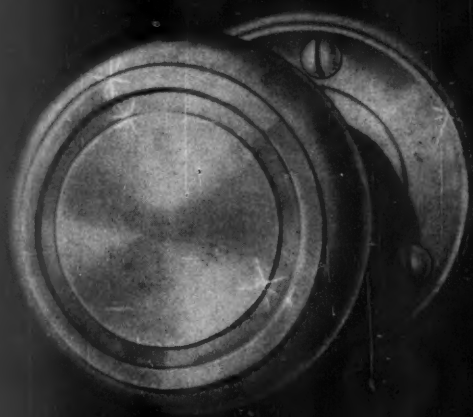
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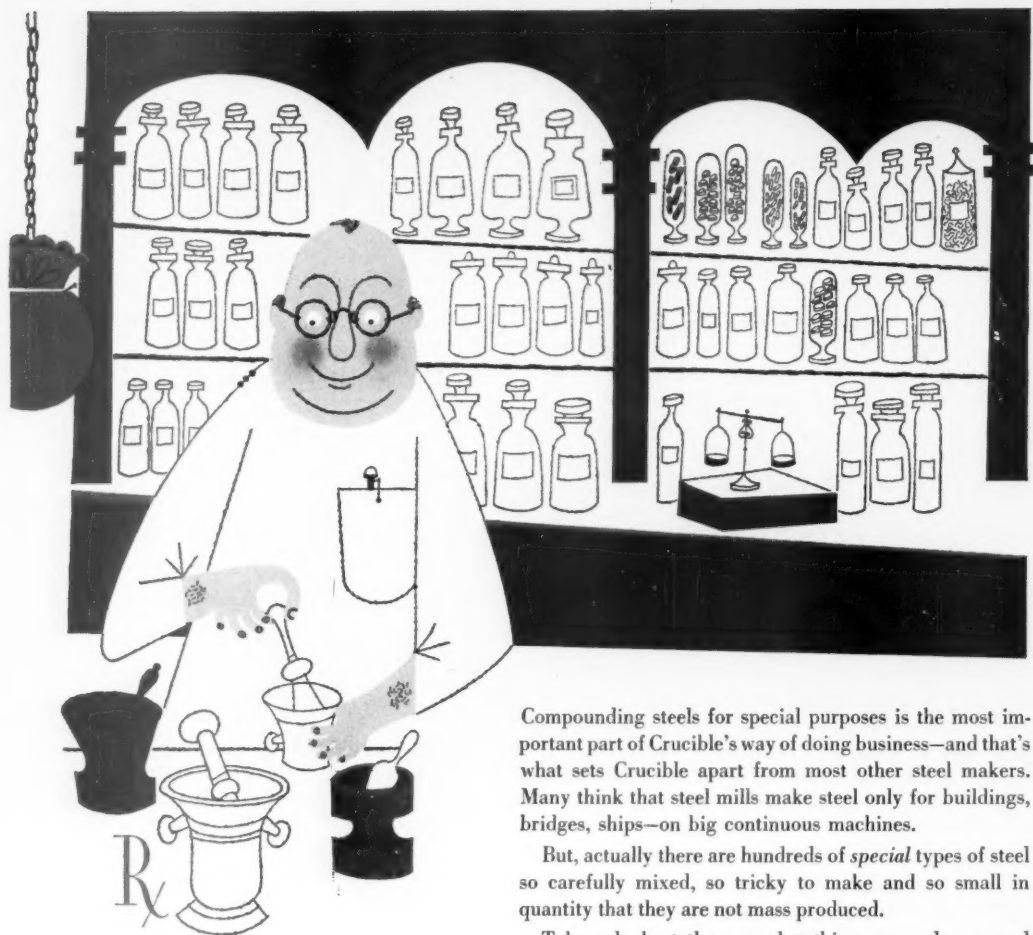
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INTERNATIONAL OUTLOOK

BUSINESS WEEK

AUGUST 11, 1951

A

BUSINESS

WEEK

SERVICE

Peace hangs heavy in the air—Soviet-type peace, that is.

The friendly message from the Soviet "President" Shvernik is the latest gambit in the Kremlin's noisiest peace offensive since World War II.

Other extraordinary developments include the opening of Pravda's columns to Britain's Herbert Morrison; airing President Truman's letter of friendship inside Russia; and Malik's soothing talk to the British Quakers visiting Moscow.

The object, of course, is to lull the West.

Look back at past peace offensives. They aren't encouraging.

- The longest period of calm between East and West was from the mid-twenties to 1939. It came to a sudden halt when Stalin signed the nonaggression pact with Hitler.

- Wartime cooperation—strained as it was—began when Hitler attacked Russia in 1941. But high hopes for good relations with the Soviets were dashed soon after V-E Day.

- Postwar aggression has been punctuated here and there by short-lived peace offensives, featuring conciliatory messages from Stalin. They've all come to naught. The phony "Stockholm appeal" was followed in three months by the invasion of South Korea.

The State Dept. has written off Shvernik's talk of a Five Power peace pact as propaganda, pure and simple.

But odds are we'll do something more. President Truman may reply to Shvernik suggesting specific actions the Kremlin could take, without making major concessions, that would ease world tension—agree to an Austrian peace treaty, for example.

Washington officials say there are two good reasons why we shouldn't brush Shvernik off completely: (1) Such a move would hand the propaganda advantage to Moscow; and (2) it's just possible that our growing strength may someday scare the Russians into calling off the cold war for a time.

Gen. Ridgway is getting impatient over the turtle pace of the Kaesong talks. You can see it in the crackling tone of his messages to the enemy.

The Communist buildup in Manchuria has him worried. Now the Chinese are boasting that they have air strength enough to wipe out the United Nations army.

Meantime, U. N. circles at Lake Success are sure a cease-fire is coming—perhaps soon. They think the wrangling over the buffer zone can be stopped.

This line of reasoning insists that Moscow wants the cease-fire—and there's little the Chinese or North Koreans can do about it.

The Iran oil talks are progressing favorably. But don't expect a quick settlement: The British are sure to stall over compensation for their lost properties.

London is now under a lot less economic pressure to make a deal. The new oil pool of U. S. companies will help carry Britain over a crisis.

That means only political pressure from the U. S.—via Harriman—will force the British to come to terms with the Iranians.

Meantime, other Middle East oil nations are watching Iran for a cue.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

AUGUST 11, 1951

They want to know how big a slice of oil profits they'll be able to wangle out of Western producers.

The Iraqis are stalling on a new agreement with the Iraq Petroleum Co. that would give them 65¢ a bbl., and the Shiek of Kuwait has turned thumbs down on an offer that would boost his take from 9¢ to 50¢.

•
It's pretty clear now that Spain's Franco isn't going to reform his regime in order to get U. S. military help. He has admitted as much.

Don Juan, pretender to the Spanish throne, accused Franco of using minor concessions to the monarchists as a blind to fool the U. S. into thinking he was ready to make some changes.

British and French diplomats, who've been fighting the Washington-Madrid deal all along, make this observation: The U. S. is now in the unpleasant position of bolstering Franco against the monarchists and a large majority of Spaniards.

But the U. S.-Spanish military deal will go through anyway. The Pentagon insists we need Spanish facilities.

•
British industry is steadily rebuilding its lost investments in the Western Hemisphere.

The decision of Courtaulds, Ltd., to reenter the U. S. market with a rayon plant in Alabama (BW-Aug.4'51,p122) puts the spotlight on other projects:

- Powell Duffryn, Ltd., a British coal firm deprived of its mines under nationalization, has launched a joint venture with Great Lakes Carbon Corp., New York.

- Bradford Dyers Assn., big English wool finishing group, recently bought stock control of two Canadian companies.

- Anglo-Iranian Oil Co. and British Shell are poking into Canadian oil possibilities.

The British Treasury gives its qualified blessing, will release dollars for such investments as long as a "good case" is made for them.

•
London thinks it may postpone the first interest payment—\$75-million—on the \$3.7-billion U. S. loan of 1945. Chancellor Gaitskell may come to Washington in September to ask for a delay.

Under the loan agreement, Britain can request postponement if exchange conditions, the level of gold reserves, or balance of payments troubles make that seem necessary (BW-Jul.21'51,p121).

It's up to the International Monetary Fund to decide. But even if Britain wins a delay, it will still have to repay principal on the loan—to the tune of \$44-million yearly.

•
Pressure for a single, independent agency to handle all U. S. foreign aid—including arms—is building up in Congress.

Many ECA officials favor the move, too. The argument is that aid programs must be more closely integrated if anything's to be accomplished. Right now France, for example, is being prodded by (1) ECA to expand low-cost housing, (2) the Pentagon to step up military production, and (3) the Treasury to balance its budget.

A new foreign-aid agency would be a blow to the State Dept. And since State is less popular with Congress than ever, the single agency idea has a good chance of going through.

BUSINESS ABROAD

JAPAN REASONS that the occupation's business reforms won't work because:

- The country can't afford competition.
- Its businesses must export to live—and must band together to export.
- Antimonopoly laws leave small companies at the mercy of big ones.
- Reforms have led to lower-quality goods.

U.S. WARNS that scrapping reforms may encourage return of fascism.

- Monopolies would coerce government into granting special privilege.
- Japan's standard of living would drop—inviting political instability.
- Dumping would return, and with it cut-throat competition for U.S. business.

Japan May Scrap Business Reform Laws

Japan is busy legislating away the business and labor reforms that were imposed on the country by U.S. authorities during the occupation.

• **Race Against Treaty**—In Tokyo a government-appointed committee composed of four Japanese businessmen, two newspaper executives, and a college president is rushing to finish drafting reforms of these reforms before the occupation ends. This committee is afraid that a delay until the peace treaty is signed might undermine foreign confidence in Japan's new democratization and bring restrictions against Japanese goods. But if this job is done soon, it feels, the occupation and the U.S. will bear the brunt of the blame.

New legislation drafted by the committee will be solidly backed by Japan's dispossessed economic barons and by a few U.S. companies who had big Japanese interests prewar. It could easily be O.K.'d by the Diet—unless the U.S. steps in to try to save its reforms.

• **Eleven on Top**—Before the war, Japan's economy was bound up in an almost feudal system of monopolies, cartels, and supercartels. At the top were the "zaibatsu"—11 families that indirectly controlled 90% of Japanese industrial, financial, and commercial activity. They spun a web of trade associations beneath them that fixed prices, laid out exclusive marketing areas.

At warend the zaibatsu were more firmly entrenched than ever. They were the ones who told Tojo how to run the war, not vice versa.

• **Occupation's Sweep**—But with the occupation, their sun set. U.S. administrators under Gen. MacArthur had four aims in mind: (1) Eliminate the zaibatsu; (2) dissolve or reorganize in-

dividual operating companies that restricted competition; (3) dispose of the zaibatsu securities; and (4) enact laws to bar revival of the monopolies and to enforce fair trade practices.

Most of these aims were accomplished: The zaibatsu holding companies and subholding companies were dissolved, and over 1,000 executives of the old order were barred from business. (They have since returned as a result of the "depurging" program.) More than 1,000 firms were forced to unload intercorporate holdings. Some 30 operating concerns were split up or reorganized.

The occupation also pushed through a slew of up-to-date labor laws—minimum work standards, rest periods, paid vacations, safety and sanitation, unemployment and accident compensation.

I. Why Keep Reforms

If these reforms are scrapped, Japanese experts in Washington say the consequences will be serious to Japan—and to many U.S. businessmen. They argue, for instance, that, if the antimonopoly law and the trade association law are junked, Japan's familiar dumping and monopoly practices in foreign trade would quickly return. That would mean cut-throat competition for U.S. business at home and abroad. It might lead to new trade barriers against Japanese exports, chopping at the roots of Japan's foreign trade. And that, in turn, would increase the burden on the U.S. taxpayer for aid to Japan.

Besides, rebuilding the prewar pyramid of monopolies would kill opportunities for smaller U.S. investors, keep them from doing business with the smaller Japanese firms that have sprouted under antitrust protection.

Pressure on economic democracy always is mirrored in the political field. Allied reforms have boosted the average Japanese living standard. Their repeal might shove it down again. The danger is the rebirth of all the old aggressive expansionist pressures that blew Japan into World War II or, even worse, the fostering of an economic climate in which communism would thrive.

II. Why Scrap Reforms

The Japanese usually preface discussions of the reform legislation with the statement that U.S. antitrust laws are well and good, but unsuited to Japanese conditions. The Japan Management Assn. speaks for the antireform circles in Japan; the American Chamber of Commerce in Tokyo speaks for U.S. companies.

Their reasoning against reform centers on these five points:

(1) Japan is too poor, its productivity too low to afford competition and high wages and labor standards.

(2) Japan must export to live, and its businessmen can compete in world markets only by banding together to fix prices and divvy up markets.

(3) The antimonopoly and fair trade laws bar affiliation among small Japanese companies, leaving them at the mercy of the big ones.

(4) High wages hit profits, hobble capital formation, create unemployment.

(5) The reforms have led to cut-throat competition, to price wars and dumping by Japanese traders abroad. And it has reduced the quality of Made-in-Japan goods.

• **Little Opposition**—Opposition in Japan to these arguments is scattered and weak. New businesses have bene-

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fitted from the reforms, but they aren't organized. And many of them are too ignorant of economic processes to attribute their new-found gains to the reforms. Organized labor is generally apathetic—actually hostile where reforms have struck at labor monopolies. The Socialists will fight for some of the labor clauses, but they don't understand—or care much—about the anti-monopoly or fair trade issue.

III. U.S. Reasoning

U.S. government supporters of the reform program are afraid an all-out economic power-grab is shaping up in Japan. One of the most zealous spokesmen for this group is Edward C. Welsh, formerly chief of the anti-trust and cartels division of Gen. MacArthur's staff, now a top official in the RFC. Reports from Tokyo indicate that the Japanese economic barons hate Welsh more than any other American; whatever reforms are in their way, they blame entirely on him.

Welsh says the reforms weren't put through just because of a U.S. belief in free enterprise, but in the belief that competition in Japan would be a "catalyst of economic recovery."

• **Where Does Business Stand?**—"It is interesting and discouraging," says Welsh, "to note the short-visioned position of a few big U.S. companies in Japan, as they support actions that will cause a decline in private competitive capitalism. Why they bend their efforts to encourage the return of fascism in Japan would be difficult to justify to their stockholders."

Welsh's reaction is typical of many U.S. officials who have been working with Japan's postwar economic problems. They admit that in some cases deconcentration may have gone too far, that some of the new Japanese companies formed by deconcentration may fail.

But they insist that Japan can afford a few business failures; it hasn't had many before simply because the giant holding companies bought up every outfit that was running in the red and managed to keep it going indefinitely.

• **Better Quality**—U.S. officials believe the new competition has led to more aggressive selling in the world market and has improved, rather than reduced, the quality of Japanese goods (BW-Jul.7'51, p148). Nor do they think that higher wages will hinder capital formation. True, some temporary unemployment will result from higher wages and productivity, but the experts feel Japan badly needs a manpower shuffle. Before the war, large numbers of workers were kept on the payrolls whether they worked or not. The aim now is to absorb them into new industries.

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Production Pushup

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ECA plans to have its industrial experts work right along with management and labor in Europe's factories. ECA has worked mostly through government and big business brass.

Also, all future ECA grants for investment to boost output—like new machinery, new plant layout—will be carefully screened. Only companies promising to give their workers a fair slice of increased profits are eligible.

There's plenty of opposition. Already Communists are attacking the drive as a scheme to turn Europe's industry over to Wall St. What's more, plenty of European businessmen take a dim view, don't like ECA prying into their traditional ways of doing business.



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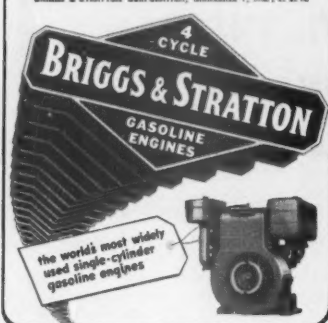
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clues



Seaway: With or Without U.S.?

Discouraged by U.S. squelching of St. Lawrence project, Canada may go ahead on its own, is hopeful that U.S. will help supply needed materials.

Boosters of the \$830-million St. Lawrence seaway and power project—among them Canadian Prime Minister St. Laurent and President Truman—are hoping mad. They've been getting progressively angrier ever since 1934, when seaway legislation was first defeated in Congress. The big letdown came two weeks ago when the House Public Works committee squelched the project once again (BW—Aug. 4 '51, p. 52).

• **What to Do**—Canadians are just about convinced they'll have to count Washington out; that the development has got to be a Canadian project, with maybe some help from the state of New York. Last week the cabinet in Ottawa ordered a special commission to draw up recommendations to lay before Parliament come October. Here are the alternatives:

• Canada can go it alone and build a navigation system on the Canadian side of the St. Lawrence, between Montreal and Kingston (map). That, plus dredging the Welland Ship Canal, would provide an all-Canada waterway to the Great Lakes. The minimum cost: \$500-million.

• Canada and the province of Ontario can tackle the power project, provided New York State gets an O.K. from the Federal Power Commission to

participate. The cost: about \$330-million.

• The whole shooting match could be shelved, to wait a time when the U.S. sees fit to go along.

• **Old Dream**—Planners and statesmen on both sides of the border have nursed the seaway scheme ever since the last century. Canadians and U.S. midwesterners have long dreamed of opening up the Great Lakes to ocean shipping. On the power side, there's at least 2.2-million hp. waiting to be harnessed in the International Rapids section between Prescott and Cornwall. Some engineers have estimated there's a potential along the St. Lawrence of 9-million hp.

Since Korea, seaway boosters have talked up the strategic angle: The project would mean a safe wartime route to haul Labrador iron ore to inland steel mills, provide sheltered shipbuilding and repair bases in the Lakes region. And there's increasing need, they say, for power to run northeast defense industries.

• **Not All Sold**—But no one has yet been able to sell Great Lakes ship operators, the Atlantic ports, the port of New Orleans, the railroads, and some of the big mining interests on the seaway. They've managed to scotch U.S.

participation every time it's come up. But there's some Canadian opposition: Nova Scotia fears the seaway might divert some trade to the Great Lakes.

But most of Canada—especially Ontario—is red-hot for the project. And, according to one New York State power official, "It doesn't look like the Canadians are bluffing when they threaten to go ahead alone."

• **No. 1 Item**—The power development might come first on the Ottawa agenda. That way the Canadian treasury could share the costs with Ontario and New York, principal beneficiaries of the scheme. But it can't get off the ground until New York gets a green light from Washington—"You can't build a hydro dam halfway across the river to the U.S.-Canada border and then stop."

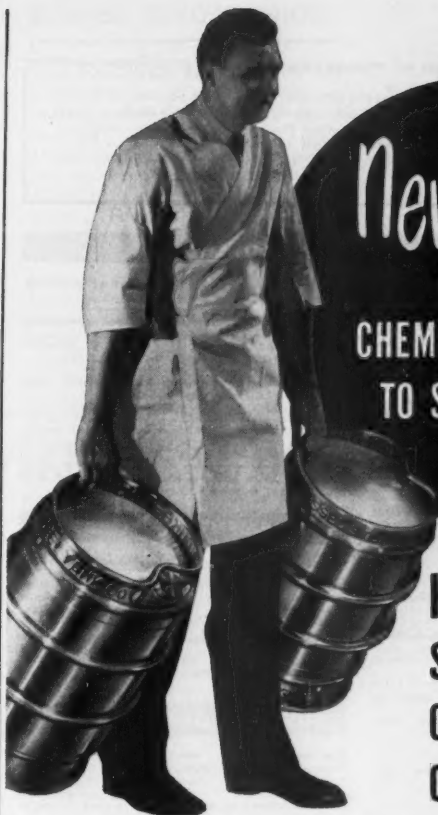
Right now New York authorities are hopeful of getting the O.K. Next week they expect to appeal an FPC decision that left the matter to Congress. They have a new brief for FPC, new evidence that St. Lawrence power is needed. One possible hitch: New York wants to handle the project alone with Ontario, but the Interior Dept. would like to run the show from Washington.

Going ahead on power may kill at least one and a half birds with one stone. Many features of the seaway, according to experts, would have to be completed in the process of building power installations.

• **All the Way?**—If Canadians really mean what they're saying, they may tackle the seaway alone, too. It's a big job. Along the international section of the river—on the Canadian side—it involves inundating seven villages and a larger town along a 47-mi. front between Cornwall and Prescott. The main line of the Canadian National Railways would have to be relocated, too. In addition, Canada would have to spend upwards of \$100-million building canals near Montreal. The job has been estimated at \$500-million, but booming material costs would bounce it a lot higher.

• **Hopeful**—Something like 70,200 tons of reinforcing steel, 108,600 tons of structural steel, 4,400 tons of copper, 7.5-million bags of cement, and 118-billion board feet of lumber are needed. Canadians are hopeful that they can dredge up these materials. They hint the U.S. would see to it that they got allocations, even though Washington turned thumbs down on the scheme.

Still U.S. and Canadian seaway boosters haven't given up, figure they'll eventually beat down U.S. opponents. Last week Sen. Blair Moody, Democrat of Michigan, vowed he'd fight tooth and nail to get authorization for the seaway into the \$8.5-billion foreign aid bill. Another thing that gives the faithful hope: The latest House vote was 15 to 12, closest yet for the seaway.



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Business Manager now employed as Industrial Engineer with ten years experience as executive in Research. Contract negotiation, excellent public relations man, supervised 300 in purchasing, accounting, maintenance, and office procedures. Box 1571.

BA Mathematics, Economics, MBA, desires job in Market Research, statistics. Box 1549.

Needle trades engineer, 4 years production, methods, incentives, experience ladies coats and suits section works. Desires West Coast or South. Complete resume. Box 1517.

Executive: Indust. engg. grad.; 25 yrs. exper. in mfg.; good judgment; excellent employee relations; strong top quality-control background. Prefer midwest or west coast. Resume on request. Box 1518.

Management Consultant desires position. Administration procedure analyst. MBA Northwestern. Los Angeles. Box 1515.

Sales Manager 39, Successful record selling business machines to dealers in industrial U.S.A. areas. Available Aug. 15. Box 1509.

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Washington, D. C., Representative Available 15 years experience in selling the Federal Government Departments, Contracts, Specifications, Priorities. James F. Hardy, Barr Bldg., Washington 4, D. C.

Sales Executive—39, experienced national distribution of chemicals thru distributors. Consider consumer or industrial field. Available Sept. 1. Box 1460.

Tool & Alloy Steel sales representative considered by users one of best in state wants new connection offering higher earning potential. Has ability to organize and direct and will relocate. Box 1582.

Detroit Sales Representative, mature, aggressive, with successful record seeks worthwhile product to augment present on line for Michigan. Prefer item for distributors and wholesalers. Commission basis only. Reply Box 1498.

Sales Engineering Representation that can sell for your Co. in Calif. while building your reputation for technical ability & integrity. Two experienced engineers (ME & MBA) with superior sales records for two different Calif. capt. mfrs. seek opportunity by forming agency. Have specialized in hydraulic-mechanical capt. for petroleum & process industries. This warrants inquiry. Box 1551.

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Confidential Employment Service for textile- paper-pulp mills seeking executives and executives seeking new positions. Charles P. Raymond Service, Inc., 294 Washington St., Boston 8, Mass. Liberty 2-6647. 50 yrs. in business.

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Consult: X. H. Polachek Reg. Patent Attorney, 1234 Broadway, New York 1, N. Y.

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Need a confidential report from abroad? Spot checks on distributing set-ups, competition, Media. Sales outlets. Currency regulations. Legislative developments. Representatives all over the world. For details, write Overseas Business Services, McGraw-Hill International Corporation, 330 West 42, New York 18, N. Y.

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Special Machinery on a No Risk Basis. Mechanics Inc., Bridgeport, Conn.

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For outright sale Friction Clutch business. -Because plant and manufacturing facilities are taxed to limit, we cannot continue to manufacture a complete line of tried and proved Friction Clutches,—so we offer (at a real bargain) not only entire manufacturing rights, but also Dies, Jig, Tools and Fixtures plus considerable stock of assembly parts. Address Box 1504.

Investment Bargain. Bomb proof. Inflation proof. Write owner and learn what \$28,000 will buy in land and natural resources. P.O. Box 211, Cuthbert, Georgia.

Metal Stamping Plant, Rocky Mountains, well established, natl. dist. own product. 650 tons 14ga. steel allocated balance of year. Profit 10% after taxes. Box 1536.

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Commodity Research

INDUSTRIAL COMMODITY RESEARCH
Specialists in Industrial Commodity Research. Determine for specific commodities—cotton, coffee, corn, fats, and oils, grain, hides—purchasing policy and price outlook. Fee basis. Write—Industrial Commodity Corporation—122 E. 42nd St., N. Y. 17, N. Y.

Industrial Auctioneers

RALPH ROSEN
Auctioneers - Liquidators - Appraisers
Industrial Plants—Machinery and Equipment.
Ralph Rosen, Genesee Bldg. Buffalo
Rosen & Co., N. R. C. Bldg. Cleveland
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Market Research

McGraw-Hill Research
Specialists in Industrial Marketing Research. Determine for specific products — markets, market potentials, relative importance of states, counties or territories. Fee basis. Write—John C. Spurr, Director—320 W. 42nd St., N. Y. 18, N. Y.

Pemex Produces

Mexican oil is doing fine. Need is for more pipe steel, more exploration. U.S. may help.

The threat of losing Iranian oil scared the living daylight out of the world's petroleum planners. That's one reason why U.S. Secretary of Interior Oscar Chapman, who doubles as Petroleum Defense Administrator, took a quick tour of the Mexican oil industry.

Mexican oil looked pretty good. Pemex, the government's oil monopoly, is headed for its biggest year. Output shapes up like this:

| Year | Millions of bbl. |
|-----------|------------------|
| 1949..... | 62 |
| 1950..... | 74 |
| 1951..... | 90 |

Besides, oil reserves are swelling. They jumped in the past year from 1.27-billion bbl. to 1.35-billion bbl. And there's a brand-new find in the state of Tabasco that may contain an added 400-million bbl. Better yet, Pemex is able to export surpluses for the first time since 1938; it may sell 20-million bbl. abroad during 1951.

Mexico has built three new refineries, one producing aviation gasoline; has laid new pipelines; and has a \$15-million lubricants plant under way. And gasoline, Mexicans like to boast, has been cut to 16¢ a gal. retail.

• **New Boss**—All this progress is a far cry from 1938, when Mexico expropriated the foreign oil companies and nationalized its oil. The novice Pemex organization limped along for nearly eight years, was shot with corruption and close to bankruptcy when hard-driving Sen. Antonio Bermudez took it over in 1946. Bermudez has made Pemex a money-making outfit. Last year it turned over \$50-million in profits to the Mexican Treasury.

It was Bermudez who buttonholed Chapman on the subject of U.S. help for Mexican oil. It's not an oil loan or handout that he wants—Bermudez boasts that Mexico can build its own refineries, etc. What Bermudez does need, though, is bigger allocations of steel and pipe, for pipelines to connect existing fields with railheads and storage centers.

Washington insists there's no specific oil deal afoot between Mexico and the U.S. The Interior Dept. claims Chapman's junket was a goodwill junket, pure and simple, and that he wanted to familiarize himself with Mexican oil problems. Interior adds that we've been allocating quite a lot of steel and pipe to Mexico; like everyone else, they want more. One straw in the wind:

THIS SECTION

is management-men's own classified advertising—use it for fast, efficient, economical action on any business want or need.

Chapman says he's going back to Mexico in late fall.

• **Drilling Needed**—If Mexico's most pressing short-range need is for steel and pipe, its long-range need is new exploration and drilling. Pemex managed to drill just 219 wells last year, only 17 of which could be called exploratory.

U. S. oil men may be helping out with the drilling. Pemex has invited several U. S. firms to come in and explore. Ed Pauley's American Independent Oil Co. is one, but it drilled only five wells in two years, and only one worthwhile producer. Some other small operators are on hand, and rumor has it that Pemex is dicker with the South-eastern Oil Co. of Jacksonville, Fla., to drill 150 new wells.

BUSINESS ABROAD BRIEFS

Ford Foundation has kicked off a \$5-million "Point 4" project of its own, starting in India and Pakistan. Agriculture will probably get top billing. Meantime the two countries will get help also from Armour Research Foundation and General Railway Signal Co., under a Point 4 contract just signed by the U. S. Dept. of Commerce.

Four toy electric train outfits from Lionel Corp., New York, are on their way to West Berlin. They'll be featured at West Berlin's festival this month, to lure kiddies away from a Communist shindig in the East sector.

New plants: Lambert Pharmacal Co.'s Canadian subsidiary has begun work on a \$270,000 factory at Toronto, Ont.

... Norway is going ahead with a \$50-million aluminum plant, to be finished in 1954 with a yearly capacity of 40,000 tons. . . . General Motors is building a new assembly plant (120 cars daily) and a radiator factory at Antwerp, Belgium.

Under a British license, Dewey & Almy Chemical Co., Cambridge, Mass., will turn out a British-type battery separator (trade name: "Darak") at its new plant in Boston. D&A has an exclusive licensing deal with the original manufacturer, Codham & Son, Ltd., Manchester, England.

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The Job of Leaders Is to Lead

Paralysis grips the leadership of our federal government. This country is living under a regime that has gone out of control. Its consequences are evident in the failure of Congress to enact into law essential bills embodying national policy.

Look at the record. More than seven months after Congress convened: Not a single appropriation bill for fiscal 1952 has been passed; vital foreign assistance legislation remains undecided; the tax bill has made its way through only one house; it was Aug. 1, after a month of stopgapping, that Congress put a new Defense Production Act on the books.

With the cold war in a critical stage, the nation is confronted with this dismaying spectacle. Why?

Some say that Congress has been so busy with investigations—of MacArthur's firing, of the RFC, of crime—that it hasn't had time to do anything else. All this adds up to an excuse—not a reason.

Others argue that the problems are uncommonly hard—how far to go in new taxes, in defense, in foreign aid, in controls. There are some grains of truth in this line of talk, but not enough.

The rock bottom fact is this: There is no leadership from the top. Look at what has been happening:

- Sen. McFarland (D., Ariz.), majority leader of the Senate, voted against the President on the rollback issue.

- Sen. George (D., Ga.), chairman of the tax-writing Finance Committee, has severely criticized the Treasury's revenue objectives in the present bill.

- Sen. Connally (D., Tex.), chairman of the Foreign Relations Committee, lashed out bitterly against the chief of the Economic Cooperation Administration when he testified for the President's foreign aid bill.

- Sen. Douglas (D., Ill.), the Fair Deal's most effective defender in the Senate, is at war with the President over the budget and judicial appointments.

Mangled Program

These items are evidence of fatal weakness. If the President's chief lieutenants in Congress won't get behind him and whip doubting Thomases within their party into line behind his bills, the Administration program will be mangled. That is just what is happening.

Nor, in the absence of strong, compelling White House leadership, has Congress been able to generate its own. Many of its chiefs have served so long they no longer have the energy and will to lead. Besides, the majority party is badly fractured by factional strife.

Nor has the minority party, whose job is to criticize and better the Administration's proposals, retrieved the situation. Its leaders, at least in the House of Representatives, have been willing to squander their efforts on a stupid project like trying to oust the Secretary of State by cutting off his pay.

This break in the circuit of leadership from the White House to Congress has many bad results. One is that legislators write laws in specific terms; viz., terms on instalment credit, on rollbacks, etc. Needless to say, this is a bad tendency in legislation. Such action strips administrators of the flexibility they need to do their jobs. But Congress clearly doesn't trust them to carry out its wishes under broad grants of power.

To pull ourselves out of this crisis in leadership is no easy thing. It will take some soul searching on the part of the President himself and of his congressional leaders. It requires of the opposition leaders something more than a bill-of-attainder mentality. It requires the individual citizen to hold his public servants to a stern accounting.

Yankee X-Ray

What's wrong with New England? Nothing, say some experts, that New England plus federal money can't cure. Jobs fell off there so sharply in 1948-49 that the Council of Economic Advisers got worried. It set up a committee to find out why, and what could be done (BW—Jul. 7 '51, p90).

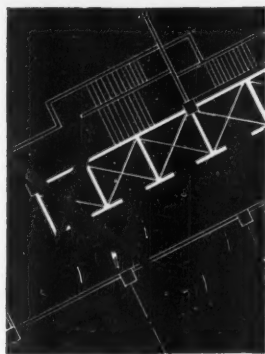
The basic study is a good one. New England—small, compact, proud—produces \$14-billion of factory goods a year. Many an independent nation does less. Its 9-million people stand on their own feet and are proud of it. Its industries were the first in the country.

Right there lies the root of trouble. New England's assets are also its liabilities. It leans heavily on old industries—shoes and textiles—and it makes them in old ways. New factories in new places, using new methods, have gone ahead. New England has moved ahead, too, but not fast enough to keep pace with the country. So say the experts.

What can be done about it? These experts recommend community projects to get in new and varied industries while the getting is good. Loosen up the tax structure. Get that steel mill. Make better use of water power. Balance the drain of federal taxes by bowing the neck to federal aid.

Most of their 37 suggestions will stir argument. That may be one of the report's best uses. Touch Yankee pride, and the fur flies.

Many of the committee's ideas are sound and useful, such as the need for New England to seek markets west of the Green Mountains and raw materials north of the St. Lawrence. But the way the committee baldly plumps for federal aid programs worries us very much. The nation owes a lot to Yankee get-up-and-go. It makes no sense to assert that its independence and individuality can be stirred by substituting the drug of federal aid for its native salt.



AN ELEVATOR YOU'LL NEVER NEED

New elevator developments give planning engineers an opportunity to use fewer cars—while actually improving elevator service!

Take modernization. Even though a building's traffic hasn't changed, elevating has. It's faster. The magic of modern electronic supervision has greatly reduced passenger waiting time. Automatic car operation has reduced travel time. Fewer cars are needed.

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mine the number of cars, their size, speed and controls—using a background of experience that is unequalled anywhere!

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Add Otis elevator planning to Otis elevator research, engineering, manufacturing, construction and service and you have the reasons why the Otis trade-mark is the symbol of the world's finest elevators and escalators. **Otis Elevator Company, 260 11th Ave., New York 1, N. Y.**

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THIS IS EASY

Whether you're a shopper or a shipper, it's easy for you to get a lot of things from where they've been to where they're going. For this, you can thank the packaging industry.

Here's an industry that's always progressing—developing better containers and packages to move more products more safely, more speedily, more economically. Important contributions to these all-round improvements are supplied by chemicals and plastics—many of them furnished by Monsanto. They are applied to paper, wood, metal, glass, foil, tape, seals, labels.

Water resistance, for example, is added by a Monsanto chemical to tubular-type containers, paper cups, Kraft bags, wrapping paper. Monsanto paper-coating lacquers improve moisture resistance, add heat-sealing features to glassine papers. Still other Monsanto chemicals, applied to wraps, inhibit rust and corrosion to metal parts.

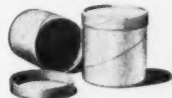
Plastics, of course, are pre-eminent in packaging. Here, too, Monsanto is a dominant factor—supplying plastics that appear in a thousand colors, for a thousand uses—for rigid and flexible packages—for luxury and utility service. Many of these plastic packages have display and re-use value.

In the field of plastic film wrappers, Monsanto also occupies an important role—supplying plasticizers for food containers and enclosures where nontoxicity is a requirement, for adhesives, vinyl films, cellulosic strip coatings.

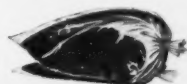
Thus, and in many other ways, Monsanto serves the packaging industry which, in turn, makes it easy for you to ship and shop more safely, speedily, economically . . . Monsanto Chemical Company, 1700 South Second Street, St. Louis 4, Missouri. In Canada: Monsanto (Canada) Limited, Montreal and Vancouver.

To the Packaging Industry

Illustrated and described here are only a few of the many applications of Monsanto chemicals and plastics to packages, containers, wraps, closures. Their production and availability are geared to meet current demands of the national economy.



Mersize*—Monsanto's synthetic size—is used as a better additive in papermaking to increase resistance to water and moisture penetration beyond that obtainable with ordinary rosin size alone. Mersize actually reduces manufacturing costs while making these improvements—finds wide application in liquid containers, milk-bottle caps and similar packaging and closure uses.



Santicizers—Monsanto plasticizers—find numerous uses as components of many types of film wrappers. Santicizer #141, B-16 and E-15 are particularly adapted to nontoxic packaging uses in the food field—are widely used in wraps for meats, fish and such fatty products as margarine and lard. Technical services available to package manufacturers.



Lustrex*—Monsanto's styrene molding compound—is widely used in the manufacture of vials, containers and packages for medicinal, drug and related products . . . **Vucapak***—Monsanto's clear cellulose acetate plastic—is extensively used in making rigid transparent containers . . . **Resinox***—Monsanto's phenolic—is used for bottle and jar closures.

WRITE FOR INFORMATION—Manufacturers of packages, containers, wraps, closures are invited to contact Monsanto in relation to any problem involving chemicals and plastics as applied to packaging . . . Write for information.

☐ Mersize, synthetic size . . . ☐ Santicizers, plasticizers for nontoxic food wraps and coatings . . . ☐ Paper-coating lacquers, heat-sealing . . . ☐ Aroclor* plasticizers for vinyl acetate adhesives and vinyl packaging film . . . ☐ Aroclor plasticizer for cellulosic strip coatings . . . ☐ Biphenyl, fungistat for fruit wrappers . . . ☐ Lustrex styrene molding compound . . . ☐ Vucapak clear cellulose acetate plastic . . . ☐ Resinox phenolic molding compounds . . . ☐ Inhibitor 038, for tin andterne plate. *Reg. U. S. Pat. Off.



Serving Industry . . . Which Serves Mankind